Limited Energy Study of Facilities in the Historic, Red Brick Main Post Area at Fort Bragg, North Carolina

Prefinal Report
Field Notes

CONTRACT #DACA01-94-D-0034 SYSTEMS CORP PROJECT #94013.05 MARCH 27, 1995



Savannah District-US Army Corps of Engineers Appeared the public endeader
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SYSTEMScorp

DEPARTMENT OF THE ARMY



CONSTRUCTION ENGINEERING RESEARCH LABORATORIES, CORPS OF ENGINEERS
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LIMITED ENERGY STUDY OF HISTORIC RED BRICK AREA, FT. BRAGG, NC SURVEY FORMS

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LIMITED ENERGY STUDY OF HISTORIC RED BRICK AREA, FT. BRAGG, NC SURVEY FORMS

The following pages include the survey forms of information gathered during the survey of the 12 Red Brick buildings for ECO-1: Instal! High Efficiency Lighting systems. Each form includes the specific lighting system information by building and the building's functional areas, such as corridors, latrines, offices, etc. Below is a listing of the minimal amount of information gathered for each functional area within each building.

- 1) room name or type
- 2) lighting fixture type
- 3) lamp type
- 4) number of lamps per fixture
- 5) watts per lamp
- 6) number of fixtures per room or area
- 7) ballast's amp factor
- 8) operating "on" or "off" electrical peak
- 9) light level reading in footcandles
- 10) additional comments, including unique operating hours, unique fixture layout, unique day lighting conditions affecting light levels, unique building conditions

The operating hours are stated under the facility information at the top of each page. If a particular area within a building deviates from the building's operating hours, it will be noted in the comment section of that area. Operating hours were determined from a combination of occupant interviews, survey observations by Systems Corp and Systems Corp's previous experience at army installations.

All Red Brick buildings surveyed, except for Building 1333, had lighting fixtures which were significantly aged and discolored. For this reason, Systems Corp determined that the lighting systems in these 11 buildings would require a lighting replacement project within the next ten years whether this project is funded or not. This replacement project would probably replace the lighting system with the same systems, such as T-12 lamps and electronic ballasts. Therefore, Systems Corp used 80 percent of the estimated high efficiency lighting project costs as an estimate of the price of the replacement project and included them in the non-energy, non-recurring savings. Building 1333 was renovated within the last two years, so no replacement cost savings were included in this project.

LIMITED ENERGY STUDY OF HISTORIC RED BRICK AREA, FT. BRAGG, NC SURVEY FORMS

A majority of the areas surveyed in the 12 buildings used T-12 four-foot-lamps in various fixture style configurations. A couple of areas surveyed had slightly high footcandle readings for the particular area's function. This allowed a reduction in the number of lamps from four to three, or three to two, in each fixture. In a few areas, the number of fixtures could be slightly reduced to allow the new system to reflect the proper light levels, but this would require a significant investment of manpower and labor to rearrange the fixture layout. For this reason, only a one-for-one fixture replacement in the fluorescent lighting systems was evaluated; otherwise, the project would lose its cost effectiveness.

LIGHTING SYSTEM SURVEY FORMS

1105 - MP ADMIN & BARRACKS Historic, Red Brick Main Post Area AREA DESCRIPTION: BUILDING NUMBER & TYPE: FACILITY INFORMATION

HOURS OF OPERATION: **BUILDING VOLTAGE:**

PAGE 10 120

P

EXISTING LIGHTING INFORMATION:

	FIXTURE	LAMP	LAMPS/	WATTS/	NO. OF	BALLAST ON/OFF	ON/OFF	LIGHTING	COMMENTS:
ROOM NAME/TYPE	TYPE (*)	TYPE (*) TYPE (**)	FIXTURE	LAMP	FIXTURES	FIXTURES AMP/MULT. PEAK	PEAK	LEVEL (fc)	OPERATING HOURS, DAYLIGHT
BASEMENT OFFICE	1X8 P	ட	2	09	10	1.2	NO	25-50	
BASEMENT CORRIDOR	1X4 P	LL.	2	34	4	0.75	NO	5-20	OPERATING HOURS - 24 HR/DY
STAIRWELL	1X4 S	u.	2	34	7	0.75	NO O	5-15	OPERATING HOURS - 24 HR/DY
OFFICE/SUPPLY	1X8 P	u.	2	09	10	1.2	NO	15-35	
BASEMENT CORRIDOR	1X8 P	ய	2	09	က	1.2	NO	5-20	
1ST FLR CORRIDOR	2X4 R	ъ	2	34	13	0.75	NO	12-31	OPERATING HOURS - 24 HR/DY
CLASSROOM	2X4 R	ட	2	34	12	0.75	NO	15-35	
1ST FI R OFFICE	2X4 R	L	2	34	59	0.75	NO	25-40	
ATRINE	1X4 S	4	2	34	2	0.75	ON		CPERATE 1DY/WK
DINING ROOM	2X4 R	L	2	34	8	0.75	NO	25-40	CIZERATE TDY/WK
STAIRWELL	1X4 P	u.	2	34	7	0.75	NO	5-15	OPERATING HOURS - 24 HR/DY
2ND & 3RD FLR CORRIDOR		L	2	34	18	0.75	NO	5-25	OPERATING HOURS - 24 HR/DY
2ND & 3RD FLR BARRACKS		ш	2	34	28	0.75	NO		CIZERATE TDY/WK
I ATRINE	!	ш	2	34	15	0.75	NO		CTYERATE TINI INK
I ATRINE	1X4 W	ഥ	2	34	4	0.75	NO		CIPERATE 1131 IVIK
EXIT SIGNS		NC	2	20	12		NO		OPERATING HOURS - 24 HR/DY

GENERAL INFORMATION

PROJECT NAME: Fort Bragg - Limited Energy Study PROJECT NO.: 94013.05

UNLESS NOTED ARE FOR JOY/MK ARENS CPURATIONS ICHE (D) ARE FOR SDY INK ARENS CPURATION 24HILIDI NEE FOR TO INK

21 SEPT 94 JAH/MWG

SURVEY DATE: SURVEY TEAM:

FACILITY INFORMATION

Historic, Red Brick Main Post Area 1120 - ADMINISTRATION AREA DESCRIPTION: BUILDING NUMBER & TYPE:

HOURS OF OPERATION: BUILDING VOLTAGE:

120, 50y/WK UNLESS 120 NOTED P PAGE.

EXISTING LIGHTING INFORMATION:

	FIXTURE LAMP	LAMP	LAMPS/	WATTS/	NO. OF	BALLAST ON/OFF	ON/OFF	LIGHTING	COMMENTS:
ROOM NAME/TYPE	TYPE (*)	TYPE (*) TYPE (**)	FIXTURE	LAMP	FIXTURES	AMP/MULT.	PEAK	LEVEL (fc)	OPERATING HOURS, DAYLIGHT
1ST FLR CORRIDOR	2X4 R	ഥ	2	34	15	0.75	NO	5-35	
1ST FLR CORRIDOR	2X4 R	Щ	4	34	13	0.75	NO	15-80	
STAIRWELL	1X4 W	4	1	34	က	0.75	NO	5-15	OPERATING HOURS - 24 HR/DY
STAIRWELL	1X4 P	Ľ.	2	34	7	0.75	NO O	5-15	OPERATING HOURS - 24 HR/DY
1ST FLR OFFICES	2X4 R	· LL	4	34	86	0.75	NO	35-60	
1ST FLR OFFICES	2X4 R	ᄔ	. 2	34	31	0.75	NO	35-60	
1ST FLR LATRINE	1X4 P	乜	2	34	-	0.75	NO		
1ST FLR LATRINE	1X2 W	ட	2	20	-		NO		
CONFERENCE RM	2X4 R	ட	2	34	8	0.75	NO	45-55	GOOD FOR OCCUPANCY SENSOR
BASEMENT CORRIDOR	1X4 P	u.	2	34	16	0.75	NO	28-45	
BASEMENT OFFICE	1X4 P	L	2	34	204	0.75	NO	30-50	CONTINUOUS ROWS OF FIXTURES
2ND FLR LATRINE	1X4 R	ഥ	2	34	24	0.75	NO		CIZEIZATINE TON/NIK
2ND FLR CORRIDOR	2X4 R	Ľ.	2	34	17	0.75	NO	10-30	OPERATING HOURS - 18 HR/DY
2ND FLR OFFICE	2X4 R	u.	4	34	94	0.75	NO	09	
2ND FLR BARRACKS RMS	2X4 R	щ	2	34	76	0.75	ÔN	15-35	OPERATING HOURS - 7 DAYS/WK
OND FIRE ATRINE	1X4 P	u.	2	34	7	0.75	NO		CPERATING 11DV/WK

GENERAL INFORMATION:

PROJECT NAME: Fort Bragg - Limited Energy Study PROJECT NO.: 94013.05

22 SEPT 94 JAH/MWG

SURVEY DATE: SURVEY TEAM:

PROJECT NO.:

7[DV | MK 24 HR/DY CPTRATION NRTE. I'TITA NOTES:

FACILITY INFORMATION:

1120 - ADMINISTRATION Historic, Red Brick Main Post Area BUILDING NUMBER & TYPE: AREA DESCRIPTION:

HOURS OF OPERATION: BUILDING VOLTAGE:

A I PAGE.

10,5 DY/WIK UNLESS NOTED

EXISTING LIGHTING INFORMATION:

A PART COMMAND AND ADMINISTRATION OF THE PART COMMAND ADMINISTRATION O	FIXTURE	FIXTURE LAMP	LAMPS/	WATTS/	NO. OF	BALLAST ON/OFF LIGHTING	ON/OFF	LIGHTING	COMMENTS:
ROOM NAME/TYPE	TYPE (*)		FIXTURE	LAMP	FIXTURES	FIXTURES AMP/MULT. PEAK		LEVEL (fc)	OPERATING HOURS, DAYLIGHT
2ND FLR LATRINE	1X4 W	<u>ı</u> .	2	3	3	0.75	NO		OPERATING 7 DYS/WK
2ND FLR DAYROOM	2X4 R	u.	4	2	2	0.75	NO	15-30	OPERATING 7 DYS/WK
2ND FLR DAYROOM	1X4 R	u.	2	34	1	0.75	NO	15-30	OPERATING 7 DYS/WK
3RD FLR CORRIDOR	2X4 R	ш	2	34	3	0.75	NO	5-30	OPERATING 7 DYS/WK
3RD FLR CORRIDOR	2X4 R	ш	4	34	14	0.75	NO	20-40	OPERATING 7 DYS/WK
3RD FLR OFFICE	2X4 R	ட	4	34	88	0.75	NO	35-60	
3RD FLR BARRACKS RMS	2X4 R	Ŀ	2	34	26	0.75	NO	15-35	OPERATING 7 DYS/WK
3RD FLR LATRINE	1X4 P	ഥ	2	34	7	0.75	NO		OPERATING 7 DYS/WK
3RD FI R I ATRINE	1X4 W	4	2	34	3	0.75	NO		OPERATING 7 DYS/WK
3RD FLR DAYROOM	2X4 R	LL.	4	34	2	0.75	NO	15-30	OPERATING 7 DYS/WK
3RD FLR DAYROOM	1X4 R	14.	2	34	-	0.75	NO	15-30	OPERATING 7 DYS/WK
EXIT SIGNS		INC	2	20	16		NO		OPERATING HOURS - 24 HR/DY

GENERAL INFORMATION:

Fort Bragg - Limited Energy Study 94013.05 PROJECT NAME:

PROJECT NO.:

TIVINK.

JAH/MWG

SURVEY DATE: SURVEY TEAM:

NZENY CATRAING 241-1410Y AKE NOTES:

FACILITY INFORMATION

Historic, Red Brick Main Post Area 1127 - ADMINISTRATION BUILDING NUMBER & TYPE: AREA DESCRIPTION:

HOURS OF OPERATION: BUILDING VOLTAGE:

10,5DY/WK UNILESS 120 NOTED **公司52** P PAGE

EXISTING LIGHTING INFORMATION:

30	TYPE (*) TYPE (**)							
		FIXTURE	LAMP	FIXTURES	FIXTURES AMP/MULT.	PEAK	LEVEL (fc)	OPERATING HOURS, DAYLIGHT
	NC NC	-	200	4		NO	5-12	
OR	NC NC	1	200	2		NO	5-12	
	IL.	4	34	16	0.75	NO	15-35	
2ND FLR OFFICE 2X4 R	ш	4	34	102	0.75	N O	20-60	
2ND FLR OFFICE 1X4 S	ш	2	34	20	0.75	NO	20-30	
2ND FLR LATRINE 2X4 R	LL.	4	34	8	0.75	NO	70-120	
3RD FLR CORRIDOR 2X4 R	<u>н</u>	4	34	18	0.75	N O	15-30	
3RD FLR OFFICE 2X4 R	۲ ۲	4	34	108	0.75	NO	02-09	
3RD FLR LATRINE 2X4 R	۲ ۲	4	34	4	0.75	NO		
STAIRWELL 2X4 R	т.	4	34	2	0.75	NO	15-25	
2ND FLR CONFERENCE RM 2X4 F	ц.	4	34	7	0.75	NO	70	
1ST FLR CORRIDOR 2X4 R	т.	4	34	3	0.75	NO	15-35	
STORAGE 1X8 P	u.	2	09	1	1.2	NO		
EXIT SIGNS	NC NC	2	20	2		NO		OPERATING HOURS - 24 HR/DY

GENERAL INFORMATION:

PROJECT NAME: Fort Bragg - Limited Energy Study
PROJECT NO.: 94013.05
NOTES: 1/2 OF FIRST FLOOR IS CLOSED OFF - TO BE RENOVATED (LEFT

22 SEPT 94 JAH/MWG

SURVEY TEAM:

SURVEY DATE:

RIGHT 1/2 OF BLDG IS A CONTROLLED ACCESS -WE COULD NOT GAIN ACCESS.

FACILITY INFORMATION

Historic, Red Brick Main Post Area 1133-ADMINISTRATION AREA DESCRIPTION: BUILDING NUMBER & TYPE:

HOURS OF OPERATION: BUILDING VOLTAGE:

PAGE

10,5DY/WK UNLESS NGET

EXISTING LIGHTING INFORMATION:

							- 11	0.11	CHAMPANA
	FIXTURE LAMP	LAMP	LAMPS/	WATTS/	NO. OF	BALLAST ON/OFF	ONOFF	CIGHING	COMMENS.
ROOM NAME/TYPE	TYPE (*)	TYPE (*) TYPE (**)	FIXTURE	LAMP	FIXTURES	FIXTURES AMP/MULT.	PEAK	LEVEL (fc)	OPERALING HOURS, DATCION
BASEMENT OFFICE	2X4 P	ட	4	34	63	0.75	N _O	45-60	
BASEMENT CORRIDOR	2X4 P	Ш	4	34	11	0.75	NO	15-60	
BASEMENT OFFICE	1X4 W	Щ	2	34	20	0.75	NO	45-60	
RASEMENT CORRIDOR	6"X4 W	ഥ	2	34	2	0.75	NO	15-60	
I ATRINE	2X4 P	LI.	4	34	2	0.75	N O		
ATRINE	1X4 W	ட	2	34	2	0.75	NO NO		
DASEMENT CONFERENCE	2X4 P	ட	4	34	4	0.75	No.	90-100	
DASCIMENT CONFERENCE		L	2	34	2	0.75	NO	90-100	
DASEMENT COM LIVERSE		и	2	34	17	0.75	NO O	10-20	
1SI FLK CORRIDOR	0.470	- 6		34	36	0.75	NO	37-54	
1ST FLR OFFICE	Z 74 LZ	_ 1		5 6	-	0.75	NO		
LATRINE	2X4 K	1	7	5	- ;		3	25 50	
1ST FLR OFFICE	2X4 R	Ц.	2	34	60	0.75	5	22-20	
ATRINE	2X4 R	ш	4	34	-	0.75	NO		
WAITING RM	2X4 R	u.	4	34	9	0.75	NO	45	
	2XA B	u	2	34	9	0.75	NO	45-65	
CONFERENCE NW	7741	. N	2	20	18		ON		OPERATING HOURS - 24 HR/DY
EXII SIGINS									

GENERAL INFORMATION:

PROJECT NAME: Fort Bragg - Limited Energy Study PROJECT NO.: 94013.05

22 SEPT 94 JAH/MWG

SURVEY DATE: SURVEY TEAM:

PROJECT NO.:

NOTES:

7107 /MK CPETANTAL ZELIRIDY ARE AZERO

FACILITY INFORMATION:

BUILDING NUMBER & TYPE: 1133-ADMINISTRATION

NG NUMBER & LYPE: 1133-ADMINISTRATION
AREA DESCRIPTION: Historic, Red Brick Main Post Area

PAGE 2 OF 2 10 ,513// WKJ 3/120 CC37 NCTE55

HOURS OF OPERATION: 10,513/1/WK US BUILDING VOLTAGE: 120 NC

EXISTING LIGHTING INFORMATION:

A DESCRIPTION OF THE PROPERTY	FIXTURE LAMP	LAMP	LAMPS/	WATTS/	NO. OF	BALLAST ON/OFF LIGHTING	ON/OFF	LIGHTING	COMMENTS:
ROOM NAME/TYPE	TYPE (*)	TYPE (*) TYPE (**)	FIXTURE	LAMP	FIXTURES	FIXTURES AMP/MULT.	PEAK	LEVEL (fc)	OPERATING HOURS, DAYLIGHT
2ND FLR CORRIDOR	2X4 R	L	2	34	17	0.75	NO	5-30	
2ND FLR OFFICE	2X4 R	ŭ.	2	34	58	0.75	NO	45	
2ND FLR OFFICE	2X4 R	L.	4	34	35	0.75	NO	65	
KITCHENETTE	2X4 R	ட	2	34	2	0.75	NO	40-50	
LATRINE	2X4 R	Ц.	2	34	3	0.75	NO	35-45	
2ND FLR FITNESS CENTER	2X4 R	工	2	34	9	0.75	N O	10-30	
2ND FLR FITNESS CENTER	2X4 R	노	4	34	2	0.75	NO	10-30	
LATRINE	2X4 R	ഥ	4	34	-	0.75	NO		
3RD FLR CORRIDOR	2X4 R	ட	2	34	12	0.75	N O	10-30	
3RD FLR OFFICE	2X4 R	ш	4	34	14	0.75	NO	50-80	
3RD FLR OFFICE	2X4 R	ш	2	34	45	0.75	NO	35-60	
LIBRARY	2X4 R	u.	2	34	12	0.75	NO	35-45	
CONFERNCE RM	2X4 R	ய	4	34	8	0.75	NO .	75	
WAITING RM	2X4 R	ш	2	34	8	0.75	NO	20-45	
COURT RM	2X4 R	и.	4	34	15	0.75	NO	30-50	
I ATRINE	2X4 R	u.	2	34	9	0.75	NO		OPERATING HOURS - 24 HR/DY

GENERAL INFORMATION:

PROJECT NAME: Fort Bragg - Limited Energy Study

PROJECT NO.: 94013.05

ES: AREAS CIRELATINICS 24 HRIDY INZE TDY/INIK

22 SEPT 94 JAH/MWG

SURVEY DATE: SURVEY TEAM:

FACILITY INFORMATION:

BUILDING NUMBER & TYPE: 1138-ADMIN &BARRACKS
AREA DESCRIPTION: Historic, Red Brick Main Post Area

HOURS OF OPERATION: BUILDING VOLTAGE:

PAGE 1 OF 2 10 504/NAK UNLESS 120 NOTED

EXISTING LIGHTING INFORMATION:

ROOM NAME/TYPE TYPE (**) TYPE (**) TYPE (**) FIXTURE LAMP FIXTURES AMP/MUL. BASEMENT OFFICE 1X8 P F 2 34 2 0.75 BASEMENT OFFICE 1X8 P F 2 34 14 0.75 STAIRWELL 1X4 P F 2 34 14 0.75 EXIT SIGNS 1NC 2 20 24 0.75 BASEMENT OFFICE 2X4 R F 2 34 6 0.75 1ST FLR CORRIDOR 2X4 R F 2 34 6 0.75 1ST FLR OFFICE 1X4 R F 2 34 4 0.75 1ST FLR OFFICE 1X4 R F 2 34 6 0.75 1ST FLR DAYROOM 2X4 R F 2 34 6 0.75 1ST FLR LATRINE 1X4 P F 2 34 6 0.75 1ST FLR LATRINE 1X4 P F 2	XH	FIXTURE	LAMP	LAMPS/	WATTS/	NO. OF	BALLAST ON/OFF		LIGHTING	COMMENTS:
1X4P F 2 34 2 1X8P F 2 60 18 1X4P F 2 34 14 1X4P F 2 34 14 1X4R F 4 34 6 1X4R F 2 34 4 SRMS 1X4R F 2 34 4 1X4P F 2 34 6 7 1X4P F 2 34 6 7 1X4P F 2 34 6 6 1X4P F 2 34 6 7 1X4P F 2 34 5 1 1 2X4R F 2 34 15 1 1 2X4R F 2 34 15 1 1 2X4R F 2 34 15 1 2 34 7 34 30 1		/PE (*)		FIXTURE	LAMP	FIXTURES	AMP/MULT.	PEAK	LEVEL (fc)	OPERATING HOURS, DAYLIGHT
1X8P F 2 60 18 1X4P F 2 34 14 1X4P F 2 24 24 2X4R F 4 34 6 24 2X4R F 2 34 6 6 VCE RM 1X4R F 2 34 4 4 NCE RM 1X4R F 2 34 4 4 S RMS 1X4R F 2 34 6 6 7 1 X4P F 2 34 5 1 1 X4W F 2 34 5 1 1 X4W F 2 34 15 1 1 X4R F 2 34 15 3 1 X4R F 2 34 30 3<		X4 P	ட	2	34	2	0.75	NO	25-40	
OFFICE 2x4 R F 2 34 14 OFFICE 2x4 R F 4 34 6 ORRIDOR 2x4 R F 4 34 6 ORRIDOR 2x4 R F 3 34 6 FICE 2x4 R F 3 34 58 FICE 1x4 R F 2 34 4 16 INTERENCE RMS 1x4 R F 2 34 4 16 2 INTERENCE RMS 1x4 R F 2 34 4 5 2 INTRINE 1x4 P F 2 34 5 2 34 5 INTRINE 1x4 W F 2 34 15 3 INTRING F 2 34 15 3 INTRING F 2 34 15 3 INTRING F 2 34 15 3		X8 P	u.	2	90	18		NO	5-25	
OFFICE 2X4 R F 4 34 6 ORRIDOR 2X4 R F 4 34 6 ORRIDOR 2X4 R F 2 34 58 FICE 1X4 R F 2 34 16 FICE 1X4 R F 2 34 4 ONFERENCE RM 1X4 R F 2 34 4 ONFERENCE RM 1X4 R F 2 34 4 ONFERENCE RMS 1X4 R F 2 34 6 ONFERENCE RMS 1X4 W F 2 34 5 TRING F 2 34 15 1 NING F 2 34 15 1		1X4 P	u.	2	34	14	0.75	N O	5-20	
2X4R F 4 34 6 2X4R F 2 34 58 2X4R F 3 34 58 1X4R F 2 34 4 SRMS 1X4R F 2 34 4 SRMS 1X4R F 2 34 6 1X4P F 2 34 6 1X4W F 2 34 5 1X4W F 2 34 5 1 2X4R F 2 34 15 2 34 F 2 34 15 1 2X4R F 2 34 15 2 34 F 2 34 15 2 34 F 2 34 15	S		INC	2	20	24		N O		OPERATING HOURS - 24 HR/DY
2X4R F 2 34 31 2X4R F 3 34 58 1X4R F 2 34 16 M 1X4R F 2 34 4 1X4R F 2 34 3 2X4R F 2 34 6 1X4W F 2 34 5 2X4R F 2 34 15 2X4R F 2 34 15 2X4R F 2 34 30		2X4 R	ΙL	4	34	9	0.75	NO	20-60	
2X4R F 3 34 58 1X4R F 2 34 16 1X4R F 2 34 4 1X4R F 2 34 3 2X4R F 2 34 6 1X4W F 2 34 5 2X4R F 2 34 15 2X4R F 2 34 15 2X4R F 2 34 30		2X4 R	上	2	34	31	0.75	NO	10-25	OPERATING HOURS - 7 DYS/WK
M 1X4R F 2 34 16 M 1X4R F 2 34 4 1X4R F 2 34 3 2X4R F 2 34 6 1X4W F 2 34 5 2X4R F 2 34 15 2X4R F 2 34 15 2X4R F 2 34 30		2X4 R	L.	3	34	58	0.75	NO	50-60	
M 1X4 R F 2 34 4 1X4 R F 2 34 3 2X4 R F 2 34 6 1X4 W F 2 34 5 2X4 R F 2 34 15 2X4 R F 2 34 15 2X4 R F 2 34 30		1X4 R	ιL	2	34	16	0.75	NO	10-25	
1X4R F 2 34 3 2X4R F 2 34 6 1X4P F 2 34 5 1X4W F 2 34 3 2X4R F 2 34 15 2X4R F 2 34 30		1X4 R	ıт.	2	34	4	0.75	NO		
2X4R F 2 34 6 1X4P F 2 34 5 1X4W F 2 34 3 2X4R F 2 34 15 2X4R F 2 34 30		1X4 R	ů.	2	34	က	0.75	NO	15	OPERATING HOURS - 7 DYS/WK
1X4P F 2 34 5 1X4W F 2 34 3 IM 2X4R F 2 34 15 I 2X4R F 2 34 15		2X4 R	L	2	34	9	0.75	NO	10-15	OPERATING HOURS - 7 DYSAWK
1X4 W F 2 34 3 2X4 R F 2 34 15 2X4 R F 2 34 30		1X4 P	Щ	. 2	34	5	0.75	NO		OPERATING HOURS - 7 DYSAWK
2X4R F 2 34 15 2X4R F 2 34 30		IX4 W	ш	2	34	3	0.75	NO		OPERATING HOURS - 7 DYSAWK
2X4R F 2 34 30		2X4 R	щ	2	34	15	0.75	NO	35	OPERATING HOURS - 7 DYS/WK
		2X4 R	ц	2	34	30	0.75	NO	30-60	OPERATING HOURS - 7 DYS/WK
1ST FLR KITCHEN 1X4S F 2 34 8 0.75		1X4 S	щ	2	34	8	0.75	ON	30-60	OPERATING HOURS - 7 DYSAWK

GENERAL INFORMATION:

PROJECT NAME: Fort Bragg - Limited Energy Study

PROJECT NO.: 94013.05

NOTES:

NZENS CPRIVITING 2014 RIDY ARE TIDITINK

SURVEY DATE: 22 SEPT 94 SURVEY TEAM: JAH/MWG

FACILITY INFORMATION:

Historic, Red Brick Main Post Area 1138-ADMIN &BARRACKS AREA DESCRIPTION: BUILDING NUMBER & TYPE:

HOURS OF OPERATION: BUILDING VOLTAGE:

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EXISTING LIGHTING INFORMATION:

	7	ī		- 1		1	T	-					Ī			
COMMENTS:	OPERALING HOOKS, DATEIGHT	IN EXHAUST HOODS					OPERATING HOURS - 7 DYS/WK			OPERATING HOURS - 7 DYS/WK		-				
LIGHTING	LEVEL (IC)		5-25	35-55	35	20	15-30	15-20				5-15	40			
ON/OFF PEAK	FEAR	NO	NO O	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO		
BALLAST ON/OFF	FIXIORES AMP/MOLI. PEAN		0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75		
NO. OF	FIXIORES	8	32	17	12	29	43	8	6	21	-	2	4	37		
WATTS/	LAMP	75	34	34	34	34	34	34	34	34	34	34	34	34		
LAMPS/	FIXIURE	-	2	2	2	2	2	2	2	2	2	2	2	2		
LAMP	1YPE (") 1YPE ("")	INC	ш	ᄕ	L	и.	ц.	ш	止	щ	ᄔ	u.	ഥ	ഥ	i	
FIXTURE	IYPE()	ပ	2X4 R	2X4 R	2X4 R	1X4 R	1X4 R	2X4 R	1X4 W	1X4 P	1X4 P	1X4 R	2X4 R	2X4 R		
	ROOM NAME/TYPE	KITCHEN	2ND FLR CORIDOR	2ND FLR OFFICE	2ND FLR LOUNGE	2ND FLR OFFICE	3RD FLR DORM RM	3RD FLR DAYROOM	3RD FLR LATRINE	3RD FLR LATRINE	LAUNDRY	2ND FLR CONFERENCE	COPY ROOM	2ND FLR BARRACKS RM		

GENERAL INFORMATION:

Fort Bragg - Limited Energy Study 94013.05 PROJECT NAME:

22 SEPT 94 JAH/MWG

SURVEY DATE: SURVEY TEAM:

PROJECT NO.:

JIN/KIL 24 HRIDA ARENS CPENNING NOTES:

* R = RECESSED, S=SURFACE, P=PENDANT, ST= SHOP TYPE, W=WALL MOUNTED & G=GLOBE

** F=FLUORESCENT, INC=INCANDESCENT, MV=MERCURY VAPOR, MH=METAL HALIDE & HPS=HIGH PRESSURE SODIUM

FACILITY INFORMATION:

1242 - MP ADMIN & BARRACKS BUILDING NUMBER & TYPE: AREA DESCRIPTION:

HOURS OF OPERATION: BUILDING VOLTAGE: Historic, Red Brick Main Post Area

10 , SCY/WK UNLESS, 120 NCTED VI III ᆼ PAGE

EXISTING LIGHTING INFORMATION:

	FIXTURE	LAMP	LAMPS/	WATTS/	NO. OF	BALLAST ON/OFF LIGHTING	ON/OFF	LIGHTING	COMMENTS:
ROOM NAME/TYPE	TYPE (*)	TYPE (*) TYPE (**)	FIXTURE	LAMP	FIXTURES	FIXTURES AMP/MULT.	PEAK	LEVEL (fc)	OPERATING HOURS, DAYLIGHT
1ST FLR CORRIDOR	2X4 R	u_	2	34	6	0.75	NO	5-25	
1ST FLR DAYROOM	2X4 R	11-	2	34	10	0.75	NO	15-30	OPERATING HOURS - 14 HR/DY
1ST FLR DAYROOM	2X2 R	u.	2	34	4	0.75	NO	15-30	OPERATING HOURS - 14 HR/DY
OLD KITCHEN AREA	1X4 R	4	2	34	3	0.75	NO	15-35	
OLD KITCHEN AREA	1X4 S	ц.	2	34	4	0.75	NO	15-35	
1ST FLR OFFICE	2X4 R	ட	2	34	12	0.75	NO	35-45	
BASEMENT ARMS ROOM	1X4 P	ഥ	2	34	12	0.75	NO		
BASEMENT CORRIDOR	1X8 P	щ	2	09	3	1.2	NO	5-15	OPERATING HOURS - 24 HR/DY
BASEMENT STORAGE	1X8 P	ட	2	09	8	1.2	NO		
OND & 3RD FI R CORRIDOR	2X4 R	u.	2	34	22	0.75	NO	5-25	OPERATING HOURS - 24 HR/DY
OND & 3RD FLR BARRACKS		u.	2	34	48	0.75	NO		CIPERATING 10Y/WK
OINGE	<u>L</u>	ட	2	34	8	0.75	NO		CIPLEATING TON/WK
I ATRINE	1X4 P	ш	2	34	19	0.75	NO		CIRRATING TOY INK
STAIRWELL	1X4 P	ш	2	34	7	0.75	NO	5-15	CHERATING TISYIMIK
EXIT SIGNS		NC NC	2	20	5		NO		OPERATING HOURS - 24 HR/DY
I ATRINE	1X4 W	ц	2	34	9	0.75	ON		CIPERATINIE FINK MIK

GENERAL INFORMATION:

Fort Bragg - Limited Energy Study 94013.05 PROJECT NAME:

PROJECT NO.: NOTES:

NZE JDY/MK AND 19-12/DY 74 LIR (D) NSPA CISISANIA

22 SEPT 94 JAH/MWG

SURVEY DATE: SURVEY TEAM:

BUILDING NUMBER & TYPE: FACILITY INFORMATION:

Historic, Red Brick Main Post Area 1326 - POST HEADQUATERS AREA DESCRIPTION:

HOURS OF OPERATION: **BUILDING VOLTAGE:**

10 SOY/WIK UNILESS 120 NOTED 9 P PAGE.

EXISTING LIGHTING INFORMATION:

COMMENTS:	OPERALING HOORS, DATLIGHT				SEPARATE SWITCH									
	LEVEL (IC)	5-30	60-85											
N/OFF	PEAK	NO	NO	NO	NO	NO	NO	NO	NO	NO				
BALLAST ON/OFF	FIXTURES AMP/MULI.	0.75	0.75	1.2	0.75			0.75	0.75					
NO. OF	FIXTURES	18	96	-	2	2	2	5	τ-	1				
WATTS/	LAMP	34	34	90	34	09	09	34	34	09				
LAMPS/	FIXTURE	2	4	2	4	ν-	1	2	4	1				
LAMP	TYPE (**)	u.	T.	u.	ц	NC	NC	ш	u	NC				
FIXTURE LAMP	TYPE (*) TYPE (**) FIXTURE	1X4 R	2X4 R	1X8 S	2X4 R			2X4 R	2X4 R					
	ROOM NAME/TYPE	BASEMENT CORRIDOR	BASEMENT OFFICES	BASEMENT STORAGE	BASEMENT COPY ROOM	BASEMENT STORAGE	BASEMENT TYPING ROOM	BASEMENT LATRINE	BASEMENT SHOWER	BASEMENT CLOSET				

GENERAL INFORMATION:

Fort Bragg - Limited Energy Study 94013.05 PROJECT NAME:

PROJECT NO .:

1ST, 2ND AND 3RD FLOORS HAVE RESTRICTED ACCESS. ONLY THE BASEMENT WAS SURVEYED. NOTES:

23 SEPT 94 JAH/MWG

SURVEY DATE: SURVEY TEAM:

BUILDING NUMBER & TYPE: FACILITY INFORMATION

Historic, Red Brick Main Post Area 1333 - ADMINISTRATION AREA DESCRIPTION:

HOURS OF OPERATION: **BUILDING VOLTAGE:**

10,5 DY/WIK UNILESS Q F PAGE.

EXISTING LIGHTING INFORMATION:

	FIXTURE	LAMP		WATTS/	NO. OF	NO. OF BALLAST ON/OFF	ON/OFF PEAK	LIGHTING	COMMENTS: OPERATING HOLIRS DAYLIGHT
ROOM NAME/IYPE	IYPE ()	IYPE(7) IYPE(7)	FIXIONE	LAIMIL	רואוטאכן	AIVIL / IVIOL I.	11	20.70	
BASEMENT CORRIDOR	1X8 P	ட	2	09	9	1.2	5	30-70	
BASEMENT BREAKROOM	2X4 R	ட	4	34	9	0.75	NO	40	
BASEMENT OFFICE	1X8 P	ш	2	09	12	1.2	NO	34-55	
BASEMENT OFFICE	2X2 P	ц.	2	34	6	0.75	NO	34-55	U-TUBE LAMPS
FILE ROOM & OFFICE	1X8 P	ᄠ	2	09	5	1.2	NO	35-40	
MAIL ROOM	1X8 P	u.	2	09	-	1.2	NO	35-45	
CONFERENCE ROOM	1X8 P	ш	2	09	2	1.2	NO	28-33	
1ST FLR CORRIDOR	2X4 R	ш	4	40	9	0.8	NO	10-50	
1ST FI R OFFICE	2X4 R	ட	4	40	34	0.8	NO	85-150	Accounting Office
1ST FI R CORRIDOR	2X4 R	ட	2	40	3	0.8	NO.	15-60	Recently Renovated
1ST FLR CONFERENCE RM	2X4 R	L.	4	40	9	0.8	NO	95	Recently Renovated
ATRINE	1X2 W	ட	2	20	2	0.42	NO.		
1ST FLR COPY ROOM	2X4 R	Ŀ	4	40	2	0.8	NO	75-120	ACCEPTLY DEDOVATED
2ND FLOOR OFFICES	2X4 R	ш	4	40	4	0.8	NO	100	Recently Renavated
2ND FLR CORRIDOR	2X4 R	ய	2	40	5	0.8	NO	10-50	Recently Renorated
OND FIR COPY ROOM	2X4 R	u.	4	40	-	0.8	ON	75-110	Recently Arnovated

GENERAL INFORMATION:

PROJECT NAME: Fort Bragg - Limited Energy Study PROJECT NO.: 94013.05

NOTES: 1 ST AND 2 ND FLOOR OFFICES RENOVATED 2 WEEKS AGO. CORRIDORS RENOVATED 2 YEARS AGO BASEMENT NOT RENOVATED.

22 SEPT 94 JAH/MWG

SURVEY DATE:

FACILITY INFORMATION

Historic, Red Brick Main Post Area 1333 - ADMINISTRATION AREA DESCRIPTION: BUILDING NUMBER & TYPE:

HOURS OF OPERATION: **BUILDING VOLTAGE:**

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EXISTING LIGHTING INFORMATION:

	T			Ť	 	<u> </u>	I					
COMMENTS: OPERATING HOURS, DAYLIGHT			Recently Renovated									
LIGHTING LEVEL (fc)		30-45	150	30-45								
ON/OFF PEAK	NO O	NO	NO	NO								
NO. OF BALLAST ON/OFF LIGHTING FIXTURES AMP/MULT. PEAK LEVEL (fc)		0.8	0.8	0.8								
NO. OF FIXTURES	2	2	9	47								
WATTS/ LAMP	09	40	40	40							•	
FIXTURE LAMP LAMPS/ TYPE (*) TYPE (**)	1	4	4	4								
LAMP TYPE (**)	INC	u.	ш	ч								
FIXTURE LAMP TYPE (*) TYPE (**)		2X4 R	2X4 R	2X4 R								
ROOM NAME/TYPE	LATRINE	2ND FLR SMOKING RM	2ND FLR CONFERENCE RM	2ND FLR OFFICE								

GENERAL INFORMATION:

PROJECT NAME: Fort Bragg - Limited Energy Study
PROJECT NO.: 94013.05
NOTES: 1 ST AND 2 ND FLOOR OFFICES RENOVATED 2 WEEKS AGO. CORRIDORS RENOVATED 2 YEARS AGO
BASEMENT NOT RENOVATED.

* R = RECESSED, S=SURFACE, P=PENDANT, ST= SHOP TYPE, W=WALL MOUNTED & G=GLOBE

** F=FLUORESCENT, INC=INCANDESCENT, MV=MERCURY VAPOR, MH=METAL HALIDE & HPS=HIGH PRESSURE SODIUM

Historic, Red Brick Main Post Area 1434-SIGNAL BTN BUILDING NUMBER & TYPE: AREA DESCRIPTION: FACILITY INFORMATION

HOURS OF OPERATION: 2 BUILDING VOLTAGE: 72

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EXISTING LIGHTING INFORMATION:

The state of the s	FIXTURE	FIXTURE LAMP	LAMPS/	WATTS/	NO. OF	BALLAST ON/OFF	ON/OFF	LIGHTING	COMMENTS:
ROOM NAME/TYPE	TYPE (*)	TYPE (*) TYPE (*)		LAMP	FIXTURES	FIXTURES AMP/MULT.	PEAK	LEVEL (fc)	OPERATING HOURS, DAYLIGHT
CORRIDOR	2X4 R	ц.	2	34	15	0.75	NO	25-30	
OFFICE	2X4 R	ш.	2	34	15	0.75	N O	25-40	
OFFICE	2X4 R	ıι	4	34	45	0.75	NO	09	
COMPUTER ROOM	1X4 P	u.	2	34	27	0.75	N O	15-20	MOUNTED ON TRACK
COMPUTER ROOM	1X4 P	ĹĹ		34	12	0.75	NO	15-20	SHOP TYPE
COMPUTER ROOM #2	2X4 R	L	4	34	30	0.75	NO	20-65	
KITCHEN/LOUNGE	2X4 R	ഥ	2	34	9	0.75	NO	10-20	
ATRINE	2X4 R	ΙŁ	2	34	4	0.75	NO		
MP ALARM ROOM	1X8 S	щ	2	09	4	1.2	NO	30-40	CONTINUOUS ROWS
RESTROOM	უ	INC	. 2	09	-		NO		
EXIT SIGNS		INC	2	20	5		NO		
							_		
					,				

GENERAL INFORMATION:

PROJECT NAME: Fort Bragg - Limited Energy Study

PROJECT NO.: 94013.05 NOTES:

SURVEY DATE: 22 SEPT 94 SURVEY TEAM: JAH/MWG

** F=FLUORESCENT, INC=INCANDESCENT, MV=MERCURY VAPOR, MH=METAL HALIDE & HPS=HIGH PRESSURE SODIUM * R = RECESSED, S=SURFACE, P=PENDANT, ST= SHOP TYPE, W=WALL MOUNTED & G=GLOBE

PAGE 1

1549 HIGH BAY GUN SHOP BUILDING NUMBER & TYPE: AREA DESCRIPTION: FACILITY INFORMATION:

Historic, Red Brick Main Post Area

HOURS OF OPERATION: **BUILDING VOLTAGE:**

10,501/NK LINLESS NG FT P PAGE.

EXISTING LIGHTING INFORMATION:

	FIXTURE	LAMP	LAMPS/	WATTS/	NO. OF	BALLAST ON/OFF		LIGHTING	COMMENTS:
ROOM NAME/TYPE	TYPE (*)		FIXTURE	LAMP	FIXTURES	FIXTURES AMP/MULT.	PEAK	LEVEL (fc)	OPERATING HOURS, DAYLIGHT
OPEN SHOP BAY	9	AW<	1	1000	32	-	NO	80-100	W/ DAYLIGHTING
OPEN SHOP BAY	1X8 P	u.	2	60	116	1.2	NO	40-100	W/ DAYLIGHTING
OFFICE	2X4 R	ш	4	34	21	0.75	NO	35-65	
LATRINE	2X4 R	L.	4	34	1	0.75	NO		
SHOP	1X8 P	<u>.</u> LL	2	09	18	1.2	NO	25-55	
AMMUNITION ROOM	1X8 P	止	2	09	4	1.2	NO	55-75	
LATRINE	1X8 P	L	2	9	2	1.2	NO		
LASER TEST ROOM	1X4 R	u.	2	34	8	0.75	NO	33-47	
OFFICE	2X4 R	u.	2	34	4	0.75	NO	25-45	
LAB ROOM	1X4 S	L	2	34	9	0.75	NO	92-09	
LAB ROOM	2X4 S	ட	4	34	12	0.75	NO	50-70	
BREAKROOM	2X4 R	Ŧ	2	34	9	0.75	NO	18-25	
BREAKROOM	2X4 R	щ	4	34	4	0.75	NO	18-25	
SUPPLY ROOM		INC	-	90	2		NO		
SUPPLY ROOM	2X4 P	Ц.,	4	34	6	0.75	NO	15-30	
HOLDING AREA	1X8 P	и.	7	09	4	1.2	NO	50-75	

GENERAL INFORMATION:

Fort Bragg - Limited Energy Study 94013.05 PROJECT NAME:

SURVEY DATE: SURVEY TEAM:

PROJECT NO.: NOTES:

JAH/MWG

FACILITY INFORMATION:

BUILDING NUMBER & TYPE: 1728 ADMINISTRATION
AREA DESCRIPTION: Historic, Red Brick Main Post Area

HOURS OF OPERATION:
BUILDING VOLTAGE:

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EXISTING LIGHTING INFORMATION:

	FIXTURE	LAMP	LAMPS/	WATTS/	NO. OF	BALLAST ON/OFF	ON/OFF	LIGHTING	COMMENTS:
ROOM NAME/TYPE	TYPE (*)	TYPE (*) TYPE (**)	FIXTURE	LAMP	FIXTURES	AMP/MULT.	PEAK	LEVEL (fc)	OPERATING HOURS, DAYLIGHT
CLASSROOMS	1X8 P	ш	2	09	62	1.2	NO	30-55	
1ST FLR OFFICE	2X4 R	u.	4	34	46	0.75	NO	50	
1ST FLR OFFICE	1X8 P	ட	2	09	8	1.2	NO	50	
1ST FLR CORRIDOR	1X8 P	4	. 2	09	2	1.2	NO	5-20	
1ST FLR COPY ROOM	2X4 R	F	2	34	2	0.75	NO O		SEPARATE SWITCH
1ST FLR CORRIDOR	2X4 R	u.	4	34	7	0.75	NO	5-20	
1ST FLR MULTIPURPOSE	1X8 P	ц	2	09	2	1.2	NO	15-25	
1SR FLR EXERCISE RM	2X4 R	ᄔ	4	34	6	0.75	NO		The state of the s
CONFERENCE ROOM	2X4 R	L.	4	34	12	0.75	NO	60-75	SEPARATE SWITCH
CONFERENCE ROOM	2X4 R	ᄔ	4	34	12	0.75	NO	60-75	SEPARATE SWITCH
2ND FLR CORRIDOR	1X8 P	ц	2	90	-	1.2	NO	5-15	
LATRINE	1X8P	ц.	2	09	-	1.2	NO		
2ND FLR LOUNGE	1X8 P	ഥ	2	09	2	1.2	NO	30	
2ND FLR OFFICE	1X8 P	u.	2	90	29	1.2	NO	25-40	
2ND FLR CORRIDOR	1X4 P	ᄔ	2	34	8	0.75	NO	5-25	
2ND FLR OFFICE	2X4 R	11-	4	34	4	0.75	NO	45	

GENERAL INFORMATION:

PROJECT NAME: Fort Bragg - Limited Energy Study

PROJECT NO.: 94013.05 NOTES:

SURVEY DATE: 22 SEPT 94 SURVEY TEAM: JAH/MWG * R = RECESSED, S=SURFACE, P=PENDANT, ST= SHOP TYPE, W=WALL MOUNTED & G=GLOBE ** F=FLUORESCENT, INC=INCANDESCENT, MV=MERCURY VAPOR, MH=METAL HALIDE & HPS=HIGH PRESSURE SODIUM

FACILITY INFORMATION:

BUILDING NUMBER & TYPE: 1728 ADMINISTRATION
AREA DESCRIPTION: Historic, Red Brick Main Post Area

HOURS OF OPERATION: BUILDING VOLTAGE:

12 S DY/V-1K UNLESS

EXISTING LIGHTING INFORMATION:

The state of the s	FIXTURE	LAMP	LAMPS/	WATTS/	NO. OF	BALLAST ON/OFF LIGHTING	ON/OFF	LIGHTING	COMMENTS:
ROOM NAME/TYPE	TYPE (*)	TYPE (**)	1	LAMP	FIXTURES	FIXTURES AMP/MULT.	PEAK	LEVEL (fc)	OPERATING HOURS, DAYLIGHT
2ND FLR OFFICE	1X4 W	L	2	34	3	0.75	NO	25-35	
2ND FLR OFFICE	1X4 P	ய	2	34	4	0.75	NO	25-45	
2ND FLR COMPUTER RM	2X4 R	ц.	4	34	8	0.75	NO	50	
3RD FLR OFFICE	1X8 P	ш	2	09	7	1.2	NO	25	
3RD FLR LATRINE	1X8 P	L	2	09	2	1.2	NO		
3RD FLR LATRINE		INC	1	09	-		NO		
CORRIDOR	1X8 P	ш	2	09	4	1.2	NO	5-25	
CORRIDOR	2X4 R	ц.	4	34	9	0.75	NO	5-25	
LOUNGE	2X4 R	ഥ	4	34	4	0.75	NO	15-35	
OFFICE	2X4 R	L	4	34	23	0.75	NO	100-125	

GENERAL INFORMATION:

PROJECT NAME: Fort Bragg - Limited Energy Study PROJECT NO.: 94013.05

CT NO.: 94013.05
NOTES: MINIMAL INDIVIDUAL SWITCHING IN OFFICES

SURVEY DATE: 22 SEPT 94 SURVEY TEAM: JAH/MWG

FACILITY INFORMATION:

Historic, Red Brick Main Post Area 1731 - ADMIN & MP BARRACKS BUILDING NUMBER & TYPE: AREA DESCRIPTION:

HOURS OF OPERATION: BUILDING VOLTAGE:

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EXISTING LIGHTING INFORMATION:

	FIXTURE	LAMP	LAMPS/	WATTS/	NO. OF	BALLAST ON/OFF		LIGHTING	COMMENTS:
ROOM NAME/TYPE	TYPE (*)	TYPE (*) TYPE (**)	FIXTURE	LAMP	FIXTURES	FIXTURES AMP/MULT.	PEAK	LEVEL (fc)	OPERATING HOURS, DAYLIGHT
1ST FLR OFFICE	2X4 R	L.	က	34	61	0.75	NO	35-50	
1ST FLR CORRIDOR	2X4 R	u.	2	34	24	0.75	N O	5-20	
1ST FLR DAYROOM	2X4 R	u.	2	34	18	0.75	NO	15-35	OPERATING HOURS - 7 DYWK
STAIRWELL	1X4 P	ц.	2	34	21	0.75	N O	5-15	OPERATING HOURS - 24 HR/DY
1ST FLR ARMSROOM	1X4 P	ш	2	34	2	0.75	N O		
OFFICES	2X4 R	ட	2	34	58	0.75	NO	30-55	
1ST FLR STORAGE	2X4 R	ட	2	34	ဆ	0.75	NO		
2ND FLR CORRIDOR	2X4 R	ц.	2	34	22	0.75	NO	5-20	OPERATING HOURS - 24 HR/DY
LATRINES	1X4 P	u	2	34	12	0.75	NO		OPERATING HOURS - 7 DYWK
LOUNGES	2X4 R	ட	2	34	16	0.75	NO	20-40	OPERATING HOURS - 7 DYWK
2ND FLR BARRACKS	1X4 R	ட	2	34	96	0.75	NO		OPERATING HOURS - 7 DYWK
LATRINE	1X4 W	Щ	2	34	12	0.75	NO		OPERATING HOURS - 7 DYWK
BASEMENT CORRIDOR	1X8 P	u.	2	09	20	1.2	NO	5-20	
BASEMENT OFFICE	2X4 R	ш	4	34	24	0.75	NO	25-55	
EXIT SIGNS		N N	2	20	9		NO		OPERATING HOURS - 24 HR/DY
3RD FLR CORRIDOR	2X4 R	ய	2	34	22	0.75	NO	5-20	OPERATING HOURS - 24 HR/DY
Communication of the communica									

GENERAL INFORMATION:

PROJECT NAME: Fort Bragg - Limited Energy Study PROJECT NO.: 94013.05

ARE TDY/MIK 24 HR 100 CIPERATING MREND MREND

22 SEPT 94 JAH/MWG

SURVEY DATE: SURVEY TEAM:

BUILDING ENVELOPE SURVEY FORMS

Building Number:	1-1242	Build	ding Section:	ALL	
Roof Sans					
Type of orientation					
Construction type	PITCHED	SHINGLE			
Insulation type/thick	NOME				
Ceiling type	LAY-IN				
Notes:					i
Wall					**
Construction type	BRICK - BL	ock			
Insulation type/thick	HONE				
Interior finish	PAINT ON	BLOCK			
Notes: กงหลีเ	E PAEWIN DOWS	36" × 36"	- No SHA) F S	
Floor					<u>\$2,176,1</u>
Construction type	BASEMENT	- SLAB ON	GRADE		
Insulation type/thick	NUNE		.,		
Interior finish	NONE				
Below grade depth	4'				
Notes:					

Building Number:	1-1326	Building Section:	AL
Roof			
Type of orientation Construction type	PITCHED SHINGL	5	
Insulation type/thick	R-11 3" The		
Ceiling type	1AY - IN	P	
Centrig type			
Notes:			
Wall			
The state of the s	Bryck, Block	·	
Construction type Insulation type/thick	NONE NONE		
Interior finish	SHOUTRUCK		
milenor milen			
Notes:	INSULATING W.	1200 50 "W X 5	52" H
	ALL WINDOWS	HAVE BUNDS	
Floor			
Construction type	The second secon	GRADE	
Insulation type/thick	NONE		
Interior finish	CAMPET		
Below grade depth	5 '		
20.0 3			
Notes:			
•			

Building Number:	1- 1333	Building Section	1: <u>A</u> 1	<u>-L</u>
Roof				
Type of orientation				
Construction type	CONCRETE	WITH WOOD FRAME, SHA	JGLES, SLO	PED
Insulation type/thick	4" LOOS	E FIL MINGER		
Ceiling type	LAY-IN	ON 1ST AND 2ND FLOO	<u>r</u>	
Notes:				
Wall Was As				
Construction type		PICK ATE GAP, B'		
Insulation type/thick	NONE	·		
Interior finish	GYP. B			
	,			
Notes:	INSULATIA	c whomes 42" x	42"	
•	•			
Floor				
Construction type	SLAB	ON GRADE		
Insulation type/thick	NONE			
Interior finish	NONE			
Below grade depth	4'			
Notes:				
1101031				

Building Number: _	1-1434	Building Section	: <u>AL</u>
Roof			
. Type of orientation	FLAT		
Construction type	METAL FRAME	· , BUILT-UP ROSE	
Insulation type/thick	R=11		
Ceiling type	ACOUSTIC TILE	B' LAY-IN T	PE
Notes:			
_			
Wall		9" BLOCK	<u> </u>
Construction type	BRICK AND	o glocit	
Insulation type/thick	NONE		
Interior finish	PAINT		
Notes:	ALL WINDOW	US BRICKED WEX	
			-
Floor			
Construction type	SLAB ON 6	MOE	•
Insulation type/thick	KUNE		
Interior finish	ASBSTOS TIL		
Below grade depth			
Notes:			

	Building Envelo	pe Survey Illiormation.	
Building Number:	2-1105	Building Section:	ALL
Jun			
Roof			《
Type of orientation	SLOPED		
Construction type	SLATE SHOWS	LES; WOOD FRAME, CON	CRITE DIZK
Insulation type/thick	NONE		
Ceiling type	LAY-IN		
Notes:			
* .			
Wall			
Construction type		1616	
Insulation type/thick	NONE		
Interior finish	PHIM		
Notes:	INCULATIN	c WINDOWS 42" x	48"
Floor			
Construction type	SLAB ON	GRADE	
Insulation type/thick	NONE		
Interior finish	KOSTUS T	NE	
Below grade depth	4'		
Neter			
Notes:			***
	· · · · · · · · · · · · · · · · · · ·		

•	pulluling En	verope carrey		
Building Number:	2-1120	Build	ing Section:	ALL
Roof				
Type of orientation	PITCHED		. 1	DEZION C
Construction type		WOOD FRAME	W/ CONCRETE	MCICIFG
Insulation type/thick	NONE			
Ceiling type	LAY-IN			
Notes:				
·				
Wall				
Construction type	Brick &	BLOCK		
Insulation type/thick	NONE			
Interior finish	PAINT			
Notes:	Insula	TIM WINDOW	5 42" x4	ช <i>"</i>
· .	,			
· · · · · · · · · · · · · · · · · · ·				
Floor				
Construction type	SLØB 5	ON GRADE		
Insulation type/thick	NONE			
Interior finish	_	05 7715		
Below grade depth	5'			
Notes:				
		,		

Building Number: _	2-1127	Building Sec	tion:	AL
Roof				
Type of orientation	PITCHED			
Construction type	SHINGLES ON	wros FRAME W/	CONCRETE	ACK
Insulation type/thick	NONE			
Ceiling type	LAY·IN			
Notes:				
* *				
Wall Wall				
Construction type	BRICK AND	BLOCK		
Insulation type/thick	NONE			
Interior finish	GYP. BUF	70		
Notes:	/NSUL#97~6	WINDOWS 3	6" x 42"	
,		·		
Floor				
Construction type	Siff ON	6rpot		
Insulation type/thick	NONE			
Interior finish	TILE			
Below grade depth	4"			
	(
Notes:				

	Dunaing Live		
Building Number: _	2-1133	Building Section:	A1c
Roof			
Type of orientation	PITCHED		
Construction type	SHINGLES ON	1 WOOD FRAME CONCERTE	Dick
Insulation type/thick	NOME		<u> </u>
Ceiling type	LAY-IN		
Notes:	,		
<u></u>			
÷			
Wall			
Construction type	BRICK &	BUCK	
Insulation type/thick	•		
Interior finish	PAINT	GYP BOTTLD	
		WINDUS - 42" x 42"	•
Notes: _	INSULATING	W'WOUS 42" X 42	
		-	
• .			
Floor			
Construction type	SLAS ON	Cross	
Insulation type/thick	NoNo		
Interior finish	MONE		
Below grade depth	5'		
Notes:			
· · · · · · · · · · · · · · · · · · ·			

		•				
Building Number:	2-1138	Build	ling Sect	tion:	ALL	
Roof						
Type of orientation	DITTILETO					i
Construction type	CONCLUTE DEC	K, WOD	FRAME,	SHNGUE	<u> 1</u>	<u></u>
Insulation type/thick	NOME					
Ceiling type	LAY-1N					<u> </u>
Notes:						
4						
		vasta waassa ii a				
Wall	**************************************					<u></u>
Construction type	BRICK &	Block				
Insulation type/thick	NONE			<u></u>		
Interior finish	PAINT	GYP. BD.				
Notes:	INSULATIN	us WINDO	ws c	72" × 9	3	
Floor						
Construction type	54B 6.	J GRADE				
Insulation type/thick	NOME_					
Interior finish	NOME					
Below grade depth	4'					
	,					
Notes:						

Building Number:	2-1549	Building Section	on: Au	
D -6 - 22				
	C 4 - 11171	CLERESTORY SELTION		
Type of orientation	PLAT WILL	OUF ON METER FR	187h 1=	
Construction type Insulation type/thick		DOARD		
Ceiling type	NONE			
Cenning type	7.000			
Notes:				
				····
				•
Wall				
Construction type	Brick &	BINK		
Insulation type/thick	NONE			
Interior finish	PANT			
milenor minari				
Notes:	SINGLE PA	10 Smalling Br	116H AL	L AKOUND
	TOP 5'	PANTED OVER		
		" HGH AL AROY		_
	lows spry 6 6	" 4164 AL FROM	ND	
Floor				
Construction type	SUAB ON	I GRADE		
Insulation type/thick	Nove			•
Interior finish	NONE			
Below grade depth				
Notes:				
Notes.		The second secon		

Building Number:	2-1728	Building Section:	ALL
Roof			
Type of orientation	1. PITCHED		
Construction type	WOOD FRAN	TE ON CONCRETE PICK	
Insulation type/thick	NONE		
Ceiling type	LAY-IN		
Notes:			
_			
Wall			
Construction type	4" BRICK FO	ND 8 BLOCK	
Insulation type/thick	_		
Interior finish		2D PAM	
Notes:		win0ous 48" H x	
-			
	GOUD WETHTHER S	STAIFFIND AND COMMENTAL	
1)	a capal An	STRIFFIND AND CHILKING	4NC15
	7 01-11-11-11-11		
Floor			
Construction type		GRADE	
Insulation type/thick	NONE		
Interior finish	NONE		
Below grade depth	41		
Natao	·		
Notes:			

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Building Envelope Survey Information:

	banang mineral	•		
Building Number:	2-1731	Building Sectio	n: <u>4</u> 0	<u></u>
			A. D. See J. C. W. March	
Roof				
Type of orientation	PITCHED			
Construction type	WOOD FRAME	, CONCRETE PECK	, SHINGLES	
Insulation type/thick	NONE			
Ceiling type	LAY -IN			
Notes: _				
Wall				
Construction type	4"BRICIC & B	" BLOCK		
Insulation type/thick	NUNE			
Interior finish	PAINT		· · · · · · · · · · · · · · · · · · ·	
		WINDOUS F8"	" " 70"	1,7
Notes: _	INSULATING	WINDOWS TO	<u> </u>	
			· · · · · · · · · · · · · · · · · · ·	
Floor				
Construction type	SLAB ON	GRADE		· · · · · · · · · · · · · · · · · · ·
Insulation type/thick	NONE			
Interior finish	NONE			
Below grade depth	4'			
Notes:				
· -				

WATER
SYSTEM
SURVEY
FORMS

	water Syst	eiii Survey	IIIIOIIIIatioii	•	
Building Number:	1-1242		Building Sec	ction:	ALL
	Manufacturer	GPM	Quantity	Aerator?	No. of users
Lavatories	Manuacturer				
Basement					
First floor	- 2	7	10	V	15
Second floor	KOHLER		10		15
Third floor	KOHIER				
Notes:	KITCHEN DISALL KITCHEN HAS (2 CAN WASH AREA) BUILDIN	JWZ (VIDEN	DONED)	
		CDE	Quantity	Mounting	No. of users
Urinals	Manufacturer	GPF	Quantity	i	110.01.0010
Basement					
First floor			1		15
Second floor	KOHLEK	3	3	WALL	1 15
Third floor	KOHLER	3		WALL	1_12
Notes: (DUTILITY SINK			ovic S	I.N. of word
Water Closets	Manufacturer	<u>GPF</u>	Quantity	Mounting	No. of users
Basement					
First floor					
Second floor	ROJAL FLUSH VLUS	2-3	1 9	FLOOK	15
Third floor	ROYAL FLUSH VLUS	2-3	<u> </u>	! FLOOIS	15
Notes:					
Shower Heads Basement First floor Second floor Third floor	Manufacturer	GPM 4.5 4.5	Quantity	Aerator?	No. of users
Notes:	CNE SHOWER.	is. Amein	<u> </u>	2 13 5-72	

uilding Number:	1.1326		Building Se	ction:	ALL
- I	Manufacturer	GPM	Quantity	Aerator?	No. of users
Lavatories Basement	AMERICAN STD	3	2	VIN	20
First floor	ELJER	3	4	Y	15
	ELTEK/ DELTA	2-3	5	Y/N_	L5
Third floor	AMERICAN STO	2-3	4	V(N)	20
Notes:					
Urinals	Manufacturer	GPF	Quantity	Mounting	No. of users
Basement	AMERICAN STD	2		WALL	2-0
First floor	KOHLEK		1_2	WALL	
Second floor	! KOHLER	١-ラ.		WALL	20
Third floor	AMESICALISTO		1_2_	WALL	115
Water Closets	Manufacturer	GPF	: Quantity	Mounting	No. of users
Water Closets Basement		GPF	: Quantity	Mounting	No. of users
Water Closets Basement First floor	AMERICAN STU		: Quantity		·····
Basement	AMERICAN STU KOHLER		7	FLOOR FLOOR FLOOR	15 15
Basement First floor	AMERICAN STU KOHLER KOHLER		ا ا	FLOOR FLOOR	15 15
Basement First floor Second floor Third floor	AMERICAN STU KOHLER		ا ا	FLOOR FLOOR FLOOR	15 15
Basement First floor Second floor	AMERICAN STU KOHLER KOHLER		ا ا	FLOOR FLOOR FLOOR	15
Basement First floor Second floor Third floor Notes:	AMERICAN IU KOHLEIR KOHLEE AM STO / KOHVER	3 3	Z	FLOOR FLOOR FLOOR FLOOR FLOOR	(9 1 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Basement First floor Second floor Third floor Notes:	AMERICAN STU KOHLER KOHLER		ا ا	FLOOK FLOOK FLOOK	(5) \S \S
Basement First floor Second floor Third floor Notes: Shower Heads Basement	AMERICAN TO KOHLEIZ KOHLE E AM STO / KOHVEZ Manufacturer	3 3 3 3 GPM	Z	FLOOR FLOOR FLOOR FLOOR FLOOR	15 15
Basement First floor Second floor Third floor Notes: Shower Heads Basement First floor	Manufacturer	3 3	Z	FLOOR FLOOR FLOOR FLOOR FLOOR	No. of users
Basement First floor Second floor Third floor Notes: Shower Heads Basement First floor Second floor	AMERICAN TO KOHLEIZ KOHLE E AM STO / KOHVEZ Manufacturer	3 3 3 3 GPM	Z	FLOOR FLOOR FLOOR FLOOR FLOOR	No. of users
Basement First floor Second floor Third floor Notes: Shower Heads Basement First floor	Manufacturer	3 3 3 3 GPM	Z	FLOOR FLOOR FLOOR FLOOR FLOOR	No. of users

	Water Syst	tem Surve	y Informatior	1:	
Building Number:	1-1333		Building Se	ction:	ALL_
Tanatarias	Manufacturer	GPM	Quantity	Aerator?	No. of users
Lavatories Basement	Wariaractare		-		
First floor	RVB 24	3-4	2	NO	12
Second floor	RVB 24	3-4	2	NO	12
Third floor	RVIS C.		1 -	—	
Notes:					
Urinals	Manufacturer	GPF	. Quantity	Mounting	No. of users
Basement	Manuacturer		: Quarterly		
First floor	(1) - 2 - A1 C \	1	7	WALL	112
Second floor	SLOAN ROYAL EV.			WALL	12
Third floor	200 KO KOYAL F.V.		<u> </u>		
Notes:					
Water Closets	Manufacturer	GPF	Quantity	Mounting	No. of users
Basement					
First floor	AMERICAN STD:	2	2	FLOOR	17-
Second floor	AMERICAN STD	7	2	FLCOK	12
Third floor	ATTEC BOX			1	
Notes:					
Shower Heads	: Manufacturer	GPM	Quantity	Aerator?	No. of users
Basement					
First floor				<u> </u>	
Second floor				<u> </u>	<u> </u>
Third floor				<u> </u>	
Notes:				u la lunca de la compansión de la compa	

Fort Bragg EEAP Survey SystemsCorp Project No. 94013.05

•	water syst	leni Surve	y Illioilliacioi	, ,	
Building Number:	1-1434		Building Se	ction:	ALL
Landarias	Manufacturer	GPM	Quantity	Aerator?	No. of users
Lavatories	- Wandadard		-	_	
Basement	21.62421 570	2	3	Y	15
First floor	AMERICAN STD		-		
Second floor					
Third floor	<u></u>				1
Notes:					
Urinals	Manufacturer	GPF	Quantity	Mounting	No. of users
Basement			:		
First floor	AMERICAN STO			INALL	18
Second floor	1		i		
Third floor					
Notes:					
No. de la Classata	Manufacturer	GPF	Quantity	Mounting	No. of users
Water Closets	Manuacturer		- Guarring		
Basement	36.316.116.1.6	7)	. 6	FLODIZ	1 12
First floor	AMERICAN STD	<u>-</u>	<u> </u>	10001-	
Second floor					
Third floor Notes:					
Shower Heads	Manufacturer	GPM	Quantity	! Aerator?	No. of users
Basement			•		
First floor			1	Pro-ga	
Second floor	**************************************				
Third floor		170 190			
Notes:					

Fort Bragg EEAP Survey SystemsCorp Project No. 94013.0.7

Notes:

	Water System S	Survey Infor	mation:		
Building Number:	2-1105		Building Se	ction:	· · · · · · · · · · · · · · · · · · ·
	Manufacturer	GPM	Quantity	Aerator?	No. of users
Lavatories	IVIATIUIACIUICI				_
Basement		<u>.</u>		 _	
First floor		2.5	7	- Y	1 20
Second floor	KOHLER	2.5		Y	20
Third floor	KOHLER	<u> </u>	<u> </u>	<u></u>	
Notes:	(2) UTILITY S	SINKS ZNO	FLOOR		
	(2) UTILITY	SINKS 3 KH	'FLOOR		
					•
No.					
Urinals	Manufacturer	GPF	Quantity	Mounting	No. of users
Basement					
First floor	. ·		Mg.		-
Second floor	SLOAN	1.5	1 3	WALL	<u> 120 </u>
Third floor	SLOAN	1.5	3	WALL	20
Notes:	APPROX ": O	PEOPLE U	SE LATRINE	S DAILY	
	l Manufacturer	I GPF	Quantity	Mounting	No. of users
· Water Closets	Manufacturer	I GFI	Quality		-
Basement	1				•
First floor	<u> </u>	3.5	' 9	FLOOR	120
Second floor	SWAN		- -	FLOOR	20
Third floor	SLOAN	3.5		; 12012	
Notes:					
•					
Shower Heads	Manufacturer	GPM	: Quantity	Aerator?	No. of users
Basement	-	-	<u> </u>		
First floor	ta	-			
Second floor	NIEDECKEN	1 2.4	5	A. ·	1
Third floor	NIEUSCKEN	1	5	i	
111113 11001	· 101 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	<u>-i</u>			

DOMESTIC CLOTHES WASHERS

2 ND FLOOR 3 RD FLOOR

Fort Bragg EEAP Survey SystemsCorp Project No. 94013.65

Notes:

	Water System .	Survey Inform	nation:		
Building Number:	2-1105	<u>.</u>	Building Se	ection:	
			Quantity	Aerator?	No. of users
Lavatories	Manufacturer	GPM	Quantity	Acrator.	
Basement				-	20
First floor	KOHLER	2.5	<u></u>	 }	20
Second floor	KOHLER	2.5	<u> </u>	-\- -\\	
Third floor	LKOHLER	2.5		. J Y	120
Notes:	(1) UTILITY	SINK IST	FLOOR I	DISH WASHIN	16 AIZEA
Motes.			FL0012 11	U KITCH FIJ	ISTEL
		SINKS 3 KIP		ANWASH A	
	(2) UTILITY	21101-5	<u>Flux</u>	2/10/00/12/1	
Urinals	Manufacturer	GPF	Quantity	Mounting	No. of users
Basement				<u> </u>	
First floor	SLOAN	1.5		WALL	30
Second floor	SLOAN	1 1.5	3	I WALL	120
Third floor	SLOAN	1.5	3	WALL	120
171110 11001	1 SOOPIS		·		
Notes:	APPROX 157	PEOPLE US	E LATRINE	S DAILY	
				· · · · · · · · · · · · · · · · · · ·	
	1 No. of about	I GPF	Quantity	Mounting	No. of users
· Water Closets	Manufacturer	1 GPF	Quartity	Wounting	1 —
Basement	1	+	1	1 51 512	30
First floor	SLOAN	3.5	<u> </u>	FLOOR	20
Second floor	ISLOAN	1 3.5	! 9	1 FL0012	
Third floor	SLOPIN	3.5	<u> </u>	! FLOOK	20
		•			
Notes:					
		· · · · · · · · · · · · · · · · · · ·			<u></u>
Shower Heads	Manufacturer	GPM	: Quantity	Aerator?	No. of users
Basement			: -	_	
First floor	NEDECKEN	2.4	: 4		20
Second floor	NIFIDECKEN	1 2.4	5		20
Third floor	INTERPOLE IN	1 24	<u> </u>		20
11110 11001	· VI = L- (C PIV				

Fort Bragg EEAP Survey SystemsCorp Project No. 94013.0.7

	Water System S	urvey Inform	mation:		
Building Number:	<u>2-1105</u>		Building Sec	ction:	
Lavatories	Manufacturer	GPM I	Quantity	Aerator?	No. of users
Basement					
First floor	KOHLER	2.5	6	Y	20
- Second floor	KOHLER	2.5	1 .	Y	20
Third floor	KOHLER	2.5		Y	
		INK IST	C1 c.A.F		
Notes:	(1) UTLITY S		FLOOR		
		INKS ZNO			
<u> </u>	(2) UTILITY S	INKS 3 KH	FLOOR	*:	<u> </u>
	•				
Urinals	Manufacturer	GPF	Quantity	Mounting	No. of users
Basement					
First floor	SLOAN	1.5	3	WALL	130
Second floor	SLOAN	1.5	3	WALL	120
Third floor	SLOAN	1.5	3	WALL	1 20
			C 1 AT 21.15	c 12 411 1 1	
Notes:	APPROX 157	PEOPLE US	E LATRINE	SOAILY	
			·		
· Water Closets	Manufacturer	GPF	Quantity	Mounting	No. of users
Basement		_			
First floor	SUDAN	3.5	4	FLOOK	1 30
Second floor	SLOAN	3.5	1 9	FLOOR	20
Third floor	SLOAN	3.5	9	FLOOR	20
Notes:			*		

Shower Heads	Manufacturer	GPM	: Quantity	Aerator?	No. of users
Basement	_		_		
First floor	NEDFCKEN	2.4	+		20
Second floor	INI = D=CICEN	2.4	. 5	<u> </u>	20
Third floor	NIZUZCKEN	··4·	5	<u>i</u>	<u> </u>

Notes:	(3) DOMESTIC CLOTHES WASHERS 2 ND FLOOR	
	(3) DOMESTIC CLOTHES WASHERS 2 ND FLOOR (3) DOMESTIC CLOTHES WASHERS 3 RD FLOOR	
		GE 38

Fort Bragg EEAP Survey SystemsCorp Project No. 94013.0 %

	Water System S	Survey Inform	mation:		
Building Number:	2-1105		Building Se	ction:	4
	Manufacturer	GPM	Quantity	Aerator?	No. of users
Lavatories	Manufacturer				
Basement		2.5	(9	Y	20
First floor	KOHLER	2.5	7	<u> </u>	20
Second floor	KOHLER	2.5		-	20
Third floor	L KOHLER	<u> </u>	<u> </u>	l I	
Notes:	(2) UTILITY S	INK 1 ST INKS 2ND SINKS 3 RD	FLCOR FLCOR		
Urinals	Manufacturer	l GPF	Quantity	Mounting	No. of users
Basement				_	
First floor	SLOAN	1.5	3	WALL	2,0
Second floor	SLOAN	1 15	2	WALL.	1 20
Third floor	SLOAN	1.5 1.5	3	WALL	120
Third floor	1 NLOPIN		<u></u>	<u></u>	
Notes:	APPROX 157	PEOPLE US	SE LATRINE	SDAILY	
- Water Closets	Manufacturer	GPF	Quantity	Mounting	No. of users
Basement					
First floor	SUDAN	3.5	4	FLOOK	<u> 130 </u>
Second floor	SLOAN	3.5	1 9	FLUDIC	20
Third floor	SLOPIL	3.0	9	F-200K	20
Notes:					

Shower Heads	Manufacturer	GPM	:	Quantity	Aerator?	No. of users
Basement			i			
First floor	NIELFCKEN	2.4	:	4		1 20
Second floor	NICHELLEN	~ <u>,4</u>		5		20
Third floor	INFLUCEPH			5		<u> 20 </u>

Notes:	185 CAN PETIC	CLOTHER WASHERS	2 NU FLOCK	
		CLOTHES WASHERS		

	Water System S	urvey Infor	mation:			
Building Number:	2-1120 Building Section:					
	Manufacturer	GPM	Quantity	Aerator?	No. of users	
Lavatories						
Basement	KOHLER	2	5	Y	20	
First floor Second floor	FLTER	2	5	Y	20	
Third floor	KOHLEK		ا	Ÿ	_20	
Notes:						
		CDE	Quantity	Mounting	No. of users	
Urinals	Manufacturer	. GPF	Quantity	Wounting		
Basement				WALL	2-0	
First floor	KOHLER	<u> </u>	1 7	WALL	20	
Second floor Third floor	ELTER			WALL	20	
Notes:				,		
Water Closets	Manufacturer	GPF	Quantity	! Mounting	No. of users	
Basement		1				
First floor	AMERICAN STD	2	2_	FLOOR VALVE	<u> </u>	
Second floor	AMERICAN STD	. 3	4	FLECK VALUE		
Third floor	AMERICAN STO	5	4	FLOOK WVE	<u> </u>	
Notes:	5 1 . s					
		0.014	·	Acrator2	No. of users	
Shower Heads	Manufacturer	, GPM	Quantity	Aerator?		
Basement						
First floor			<u> </u>	-	10	
Second floor	EXYLE	1 2 2	<u> </u>	· · · · · · · · · · · · · · · · · · ·		
Third floor	- PRYDE	<u> </u>	<u></u>		10	
Notes:						

	Water System St	urvey Info	rmation:		
Building Number:	2-1120		Building Se	ction:	_2
	Manufacturer	GPM	Quantity	Aerator?	No. of users
Lavatories	Ivianulacturer				
Basement	KOHLER	7	2_	Y	50
First floor	KOHLEK	2		Y	50
Second floor	KOHLEK	7	3 2	Y	25 -
Third floor	ROMLER			· · · · · · · · · · · · · · · · · · ·	
Notes:				· · · · · · · · · · · · · · · · · · ·	
		0.05	Overtity	Mounting	No. of users :
Urinals	Manufacturer	GPF	Quantity	iviouriting	140. 01 40010
Basement			<u> </u>	1 011	50
First floor	KOHLEK			WALL	S ()
Second floor	KOHLER	<u> </u>		1 wall	25
Third floor	KOHLER			WALL	
Notes:					
Water Closets	Manufacturer	GPF	Quantity	Mounting	No. of users
Basement	177011010010101				
First floor	AMERICAN STU	2,	7	FICER VLVE	50
Second floor	AMERICAN STU	3	3	FLYCK VLVE	50
Third floor	AMERICAN TO	2	5,	FESOR VLVE	<u> </u>
Notes:					
					, , , , , , , , , , , , , , , , , , ,
Shower Heads	Manufacturer	GPM	Quantity	Aerator?	No. of users
Basement	! ~				
First floor	:				
Second floor				-	· · · · · · · · · · · · · · · · · · ·
Third floor				; <u></u>	
Notes:					

	Water System S	urvey Infor	mation:		
Building Number:	2-1120		Building Sec	ction:	3
	Manufacturer	GPM	Quantity	Aerator?	No. of users
Lavatories	Manufacturer		1		
Basement	140111 69	2.5	2	Y	18
First floor	KOHLER	25	9	Y	20
Second floor Third floor	KOHLER	2.5 2.5	.9	7	20
I nira iloot	NOMINE		\\	•	
Notes:	(1) UTILITY SI	NE SILE	<u> </u>		
Urinals	Manufacturer	GPF	Quantity	Mounting	No. of users
Basement				i	
First floor	SWAN			WALL	20 18
Second floor	KOHLER		5	WALL	18
Third floor	KOHLFR			WALL	18
Notes: 					
Water Closets	Manufacturer	GPF	Quantity	Mounting	No. of users
Basement	·		. 1	FLOOR	
First floor	AMERICAN STD	3	2	FLOOR	20
Second floor	AMERICAN STD		٥	FLOOR	18
Third floor	AMERICAN STU		6	FLOOIZ	18
Notes:					
Shower Heads Basement	Manufacturer	GPM	Quantity	Aerator?	No. of users
First floor		<u> </u>	7_	I SIN FLOW	20
Second floor		T-75-		Low Flow	18
	<u> </u>			LCL- MON	
Third floor				<u> </u>	
Notes:	9 Daitzaw (i) 1 Daitzaw (i)		ZND FLOCK 324 F. CCK		

	Water System Su	irvey Infor	mation:		
uilding Number:	2-1127		Building Se	ction:	ALL
	Manufacturer	GPM	Quantity	Aerator?	No. of users
Lavatories	Iviariulation		_		
Basement	KOHLER	2.5	7	Y	15
First floor		7.S	14	Y	15
Second floor	KOHLEK	7.5	1 3	Y	15
Third floor	KOHLEK			· · · · · · · · · · · · · · · · · · ·	
Notes:					
					N
Urinals	Manufacturer	GPF	Quantity	Mounting	No. of users
Basement					
First floor	SLOAN	1.5	1 2	WALL	15
Second floor	SLOAN	1.5	1 4	WALL	15
Third floor	SLOAN	1.5	3		15
Water Closets	: Manufacturer	GPF	Quantity	Mounting	No. of users
Basement				<u> </u>	1
	AMERICAN STD	3	5	FLOOK VALVE	15
	AMFRICAN STD	3	: 12	FLOOK VALVE	
Third floor	AMERICAN DU		<u> </u>	FLOOR VALVE	12
Notes:					
			0 411.	\ Acrotor?	No. of users
Shower Heads	Manufacturer	GPM	Quantity	Aerator?	140. 01 43613
Basement	:		<u>: </u>	<u> </u>	<u> </u>
First floor	: -			_	-
Second floor			:		
Third floor					:
Notes:					

:	Water System S	urvey Infor	mation:		
ıilding Number:	_2- µ33		Building Se	ction:	ALL
	Manufacturer	GPM	Quantity	Aerator?	No. of users
Lavatories		2.5	5	Υ	20
Basement	AMERICAN STD	2.5	1 7	Y	20
First floor	ANERICAN STD	25	1 -	1	20
Second floor	AMERICAN STD	7.5 2.5	 	7	20
Third floor Notes:	AMERICAN STU				
Urinals	Manufacturer	GPF	Quantity	Mounting	No. of users
Basement	AMERICAN STD		2	WALL	120
First floor	AMERICAN TID		1	WALL	2.0
Second floor	AMERICAN STD		i	WALL	120
Third floor	AMERICAN STD	ı		WALL	1 20
					1.11
Water Closets	Manufacturer	GPF	Quantity	Mounting	No. of users
Basement	AMERICAN STD	· <u>5-3</u>	<u> </u>	FLOOR VALVE	
First floor	AMERICAL TO	2-3	9.	FLOVE	1.0
Second floor	AMERICAN STD	7-3	<u> </u>	Fidi	10
Third floor	AMECICAL TO	7-3	7	TELEVAK.	1 7.0
Notes:					
					i Nia of wood
Shower Heads	Manufacturer	: GPM	Quantity	Aerator?	No. of users
Basement	ELJER	4.5	2		10
First floor		<u> </u>	·		
Second floor	,	i			
Third floor	:		_ <u>i</u>		
Notes:					

	Water Sys	tem Survey	Information):	
uilding Number:	2-1138		Building Se	ction:	1
- to via a	Manufacturer	GPM	Quantity	Aerator?	No. of users
Lavatories	Walladada				
Basement	KOHLER	2	2	Y	20
First floor	KOHLER	7	8	Ÿ	20
Second floor Third floor	KOHLER	7	Ÿ	1	20
Notes:	NOTICE				
Urinals	Manufacturer	GPF	Quantity	Mounting	No. of users
Basement					
First floor	KOHLER	2,	\	1 WALL	20
Second floor	KCHLER	3,	, 3	WALL	20
Third floor	KCHLER	Ź	3	WALL	1 20
				Mauring	No. of users
Water Closets	Manufacturer	GPF	Quantity	Mounting	No. or users
Basement	<u> </u>		:	<u> </u>	7.
First floor	KOHLER	3	2	FLOOK	70
Second floor	KOHLFIX	3	9	FLOOK	1 20
Third floor	KOHLEK	<u> </u>		FLOOK	<u> </u>
Notes:					
					I No of Hoors
Shower Heads	Manufacturer	GPM	Quantity	Aerator?	No. of users
Basement	:	<u> </u>	·	<u> </u>	
First floor		<u> </u>	<u>, </u>		
Second floor	KOHLEK	6-10			+
Third floor	· KOHLEK	6-10	<u> </u>		20
Notes:					

	•		' Information		
uilding Number:	2-1138		Building Sec	ction:	_2_
Lavatories	Manufacturer	GPM	Quantity	Aerator?	No. of users
Basement	سر ۱۷٬۵٬۱۵٬۵۰				
First floor	KOHLER	2	7	Υ	120
Second floor	KOHIE-IZ	2	S.	У	70
Third floor	KOHLEK	7	; Š	Y	120
Notes:	(I) WASHING M LZ YTLINU (L)	MACHINE 2	3KP FLOOK	FLOOKS FA	4
Urinals	Manufacturer	GPF	Quantity	Mounting	No. of user
Basement					
First floor	KCHLER	3 3	3	WALL	120
		•			7.0
Second floor	LOHLER	<u>ع</u>	1 2	WALL	
Second floor Third floor Notes:	KOHLER KOHLER	3	3	WALL	7.6
Third floor Notes:	KOHLER	3	3	WALL	1 20
Third floor		3 3 GPF	Quantity	Mounting	1 7.6
Third floor Notes: Water Closets Basement	Manufacturer —	GPF	Quantity	WALL Mounting	No. of use
Third floor Notes: Water Closets Basement First floor	Manufacturer AMERICAN STD	GPF	Quantity	Mounting	7.6 No. of use
Third floor Notes: Water Closets Basement First floor Second floor	Manufacturer AMERICAN STE	GPF 	<u> </u>	Mounting Ficol Ficol	No. of use
Third floor Notes: Water Closets Basement First floor	Manufacturer AMERICAN STD	GPF	Quantity — — — — — — — — — — — — — — — — — —	Mounting	7.6 No. of use
Third floor Notes: Water Closets Basement First floor Second floor	Manufacturer AMERICAN STE	GPF 	<u> </u>	Mounting Ficol Ficol	No. of use
Third floor Notes: Water Closets Basement First floor Second floor Third floor	Manufacturer AMERICAN STE	GPF 	<u> </u>	Mounting Ficol Ficol	No. of use
Third floor Notes: Water Closets Basement First floor Second floor Third floor Notes:	Manufacturer AMERICAN STE AMERICAN STE AMERICAN STE	GPF 	<u> </u>	Mounting Ficol Ficol	No. of use
Third floor Notes: Water Closets Basement First floor Second floor Third floor Notes:	Manufacturer AMERICAN STE	GPF 2-3 2-3 2-3	5 8 7	Mounting Ficol Ficol Ficol Ficol	No. of use
Notes: Water Closets Basement First floor Second floor Third floor Notes: Shower Heads Basement	Manufacturer AMERICAN STE AMERICAN STE AMERICAN STE AMERICAN STE AMERICAN STE AMERICAN STE	GPF 2-3 2-3 2-2	5 8 7	Mounting Ficol Ficol Ficol Ficol	No. of use
Third floor Notes: Water Closets Basement First floor Second floor Third floor Notes:	Manufacturer AMERICAN STE AMERICAN STE AMERICAN STE	GPF 2-3 2-3 2-3	5 8 7	Mounting Ficol Ficol Ficol Ficol	No. of use

2-1138		Building Se	ction:	3
Manufacturer	GPM	Quantity	Aerator?	No. of users
- Mandadal G				
NOMI EIS	7	(0	Y	120
	7	11	Ý	7.0
	7.		1	20
Manufacturer	GPF	Quantity	Mounting	No. of users
		_		
VCHIEV	3	3	IWALL	1 20
	3	3	I WALL	20
	3	: 3	WALL	20
				No of year
Manufacturer	GPF	Quantity	Mounting	No. of users
Manufacturer :				
AMERICAN STD	2-3		FLCOIC	2.0
AMERICAN STD	7-3 2-3	Quantity — 4	FLCOIR	7.0 2.0
AMERICAN STD	2-3		FLCOIC	2.0
AMERICAN STD	7-3 2-3		FLCOIR	7.0 2.0
AMERICAN STD	7-3 2-3		FLCOIR	7.0 2.0
AMERICAN STD	7-3 2-3		FLCOIR	7.0 2.0
AMERICAN STD AMERICAN STD AMERICAN STD	2-3 2-3 2-3 2-3	400	FLCOIR FLCOR FLCOIR	2.0 2.0 2.0 2.0
AMERICAN STD AMERICAN STD AMERICAN STD	2-3 2-3 2-3 2-3 ————————————————————————	400	FLCOIR FLCOR FLCOIR	2.0 20 2.0 2.0 No. of user
AMERICAN STD AMERICAN STD AMERICAN STD AMERICAN STD AMERICAN STD AMERICAN STD	2-3 2-3 2-3 2-3	400	FLCOIR FLCOR FLCOIR	2.0 2.0 2.0 2.0
	Manufacturer KOHLEK KOHLER KOHLER KOHLER KOHLER	Manufacturer GPF KOHLER 2 KOHLER 2 KOHLER 3 KOHLER 3	Manufacturer GPF Quantity KCHLEK 3 3 KCHLEK 3 3	Manufacturer GPF Quantity Mounting KCHLEK 3 3 WALL KOHLEK 3 WALL KOHLEK 3 WALL

	- · · · •		Building Sec	:tion:	ALL
ilding Number:	2-1549		Bulluling Sec		
Lavatories	Manufacturer	GPM	Quantity	Aerator?	No. of users
Basement					
First floor	AMERICAN STD	3-4	7	No	10
Second floor	AMERICAN				<u> </u>
Third floor				-	i —
Notes:	(1) SERVICE S	INK			
Urinals	Manufacturer	GPF	Quantity	Mounting	No. of users
Basement					
First floor	AMEIZICAN STD	2	4	FLOOR	10
Second floor	HINGIC IC VIN 31	1			
Third floor	•	i			:
Notes:					
		· ODF	Quantity	Mounting	No. of user
Water Closets	Manufacturer	GPF	Quantity	Mounting	No. of user
Water Closets Basement		<u> </u>			
Water Closets Basement First floor	Manufacturer AMERICAN STD	GPF	Quantity	Mounting FLOOK	No. of user
Water Closets Basement First floor Second floor		<u> </u>			
Water Closets Basement First floor		<u> </u>			
Water Closets Basement First floor Second floor		<u> </u>			
Water Closets Basement First floor Second floor Third floor		<u> </u>			10
Water Closets Basement First floor Second floor Third floor Notes:	AMERICAN STD	<u> </u>			10
Water Closets Basement First floor Second floor Third floor Notes: Shower Heads	AMERICAN STD			FLOOR	10
Water Closets Basement First floor Second floor Third floor Notes: Shower Heads Basement	AMERICAN STD			FLOOR	No. of user
Water Closets Basement First floor Second floor Third floor Notes: Shower Heads Basement First floor	AMERICAN STD			FLOOR	10
Water Closets Basement First floor Second floor Third floor Notes: Shower Heads Basement	AMERICAN STD			FLOOR	10

Building Number:	2-1725	Building Section:	

- Laurata rica	Manufacturer	GPM	Quantity	Aerator?	No. of users
Lavatories	TVIAITATACTOTOT			_	_
Basement		<u></u>			
First floor			1 - 6	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1 2 ()
Second floor	AMERICAN STD	12.5	1 7	<u> </u>	
Third floor	T ~				

Notes: <u>BATHROOM ON 3 RD FLOOK PADLICKED AND</u>
ABANDONED

Urinals	Manufacturer	GPF	Quantity	Mounting	No. of users
Basement		_			
First floor					
Second floor	ISLOAN ROYAL WE		1 6	WALL	20
Third floor					

Notes:

Water Closets	Manufacturer	GPF	Quantity	Mounting	No. of users
Basement					
First floor					
Second floor	AMERICAN STD	3	1 6	FLCOIZ	20
Third floor		-	<u> </u>		

Notes:

Shower Heads	Manufacturer	GPM	Quantity	Aerator?	No. of users
Basement	_				
First floor I					
Second floor					
Third floor				<u> </u>	

	Notes:	
PAGE 49		

Fort Bragg EEAP Survey SystemsCorp Project No. 94013.05

	Water Sys	stem Survey	Information	•	
Building Number:			Building Sec		
		CDM	Quantity	Aerator?	No. of users
Lavatories	Manufacturer	GPM_	Quantity	7 Crator 1	
Basement					
First floor		<u> </u>	<u>~</u>	NO	20
Second floor	AMERICAN STD	3-4		100	
Third floor					
Notes:	3RD FLOOR	RATHICON	1 CONVER	TED TO CL	ASTROUN
					No of usors
Urinals	Manufacturer	GPF	Quantity	Mounting_	No. of users
Basement					
First floor					
Second floor	-		1		+ -
Third floor					
Notes:					
Water Closets	Manufacturer	GPF	Quantity	Mounting	No. of users
Basement				<u> </u>	
First floor				<u> </u>	
Second floor	AMERICAN STD	3	1 6	FLOOK	120
Third floor					
Notes:					
Shower Heads	Manufacturer	GPM	Quantity	Aerator?	No. of users
Basement				<u> </u>	
. First floor					
Second floor	COCKLELL	l (o			
Third floor		1 -			
Notes:					

	Water Sys	tem Survey	/ Information	7:	
Building Number:	2-1728		Building Se	ection:	3
	Manufacturer	GPM	Quantity	Aerator?	No. of users
Lavatories	Manuacturer				_
Basement					-
First floor	A . (5/21// L STO)	2-3		N	15-5
Second floor	AMERICAN STO	2	2		115
Third floor	AMERICAN STD		1		
Notes:					
		GPF	Quantity	Mounting	No. of users
Urinals	Manufacturer	GFF	Quantity	1 Wounting	
Basement			 		
First floor			2	INALL	15
Second floor	AMERICAN TO	2	2	WALL	1 15
Third floor	IAMFRICANI STO 1	<i></i>	<u> </u>	1 (277), C	
Notes:					
Water Closets	Manufacturer	GPF	Quantity	Mounting	No. of users
Basement	- Wandadard		 -		
First floor	_				
Second floor	LANGERAN TIV		6	FICUR	115
: Third floor	LAMERICAN STOD	3	3.	FLOOR	
Notes:	THE SECTION TO				
			•		
Shower Heads	Manufacturer	GPM	Quantity	Aerator?	No. of users
Basement				<u> </u>	<u> </u>
. First floor					<u> </u>
Second floor		5	<u> 4 </u>		
Third floor					<u> </u>
Notes:					

	Water Sy:	stem Survey	/ Informatioi ·	1.	
Building Number:	2-1731	-	Building Se	ction:	
Lavatories	Manufacturer	GPM	Quantity	Aerator?	No. of users
Basement	KOHLER	2.5	4	У	15
First floor	KOHLER	7	7	\ <u>\</u>	20
Second floor	KOHTEK KOHTEK	1 5	7	1 7	70
Third floor	KOIT (LK	1 5	7	7	7 <i>0</i> 20
Notes:	UTILITY SIN	ES ON ZN	0/3 RD FL	00165	
Urinals	Manufacturer	GPF	Quantity	Mounting	No. of users
Basement	SLOAN	1 3		WALL	15
First floor	ISLOAN	3		WALL	20
Second floor	ISLOAIJ	3	}	WALL	10
Third floor	SIJOAN	3		I WALL	<u> </u>
Water Closets	Manufacturer	GPF	Quantity	Mounting	No. of users
Basement	SWAN	4.5	1 3	FLOOP	120
First floor	I LOAN	1 7-3	12	F1.0012	1 20
Second floor	SOM	2-3	9	FLOOR	1 20
: Third floor	S) oArJ	1 2-3	1 9	FLOOK	1 20
Notes:					
		GPM	Quantity	Aerator?	No. of users
Shower Heads	Manufacturer	GFIVI	Quartity	7.014.01.	
Basement	1			1 -	
First floor	I de la companya de l	2-3	1 7		26
Second floor	INSTITUTIONAL	1 2-2	+		120
Third floor Notes:	INSTITUTION AL	!			

uilding Number:	7-1731		Building Se	ction:	
	Manufacturer	GPM	Quantity	Aerator?	No. of use
Lavatories	ļ	2	4	Y	10
Basement	KOHIFR	7	7	Y	15
First floor	KOHLER	7	1-7	Y	
Second floor Third floor	KOHLFE	7	+	1	15
Notes:	UTILITY SINK	5 ON 21	vP/3KD F	.00125	
Urinals	Manufacturer	GPF	Quantity	Mounting	No. of use
Basement			<u> </u>		<u> </u>
First floor	SLOAN	3		WALL	15
Second floor	SLOAN	3		INALL	I IS
Third floor	ISLOAN	3		1 HUALL	15
Water Closets	Manufacturer	GPF	Quantity	Mounting	No. of use
	SWAN	3	<u> </u>	FICOK	1 13
Basement	1 1007111				1
Basement First floor	SLOAN	2-3	7.	FLOOK	15
	SLOAN	7-3	1	FLOOR	21
First floor	SLOAN				1 <u>S</u> <u>1</u> S 1 3
First floor Second floor	SLOAN	7-3	1	FLOOR	21
First floor Second floor Third floor	SLOAN	7-3	1	FLOOR	
First floor Second floor Third floor	SLOAN	7-3	1	FLOOR	2
First floor Second floor Third floor Notes:	SLOAN SLOAN	2-3 2-3		TEOOK TEOOK	
First floor Second floor Third floor Notes: Shower Heads Basement	SLOAN SLOAN	2-3 2-3 GPM		TEOOK TEOOK	
First floor Second floor Third floor Notes: Shower Heads	SLOAN SLOAN	2-3 2-3		TEOOK TEOOK	

	Water Syste	em Survey	/ Information	•	
Building Number:	2-1731		Building Sec	ction:	3
	Manufacturer	GPM	Quantity	Aerator?	No. of users
Lavatories	J	?	7	7	10
Basement	KOHLEK	7	+	7	15
First floor	KOHIER	2	नं	V	17.
Second floor	KOHLER			7	15
Third floor	1 KOHNEK	<u></u>		L	1
Notes:					
Urinals	Manufacturer	GPF	Quantity	Mounting	No. of users
Basement		<u>م</u>			<u>:</u>
First floor	ISIOAN	2		WALL	15
	SLOAN	.5,	1 3	WALL	1/15
Third floor	SICAN		1 2	INALL	is
Notes:					
Water Closets	Manufacturer	GPF	Quantity	Mounting	No. of users
Basement		7-3	2	FLOOR	. 10
First floor	SLOAN	2-3	2	FICOR	1 15
Second floor	SLOAN	7-3	<u> </u>	FIDOR	15
	SLOAN		9	FLOOR FLOOR	15
Third floor Notes:	SLOAIJ				
Charles Upodo	Manufacturer	GPM	Quantity	Aerator?	No. of users
Shower Heads Basement	- Manufacturer		+		
				_	
First floor		2-3	7		15
Second floor	THADITATION		- -		<u> </u>
Third floor	- ANTOTIONAL -	<u></u>			
Notes:					

HVAC SYSTEM SURVEY FORMS

Ft. Bragg EEAP Survey SystemsCorp project number 94013.05

NAC System Survey Information

Building number	1242		Building sectio	n number	1-2-
	2 pipe cu/hw		Location _	BASERWATE	MECHIRA
System type	· /		Model no.	L 1420	
Manufacturer	Arcthern		_		
Serial number	9100902		CFM _		
Static pressure		, 	Cooling type _	CW	
Heating type	HW.		OA cfm _	20%?	
neating type					
Sketches & notes:	Starts	EMILE	FAULIN THE	TIS SIM OF	THATTNG TO

7.5 HP GARPUI FAIN

PUNNING TIDAY

Ft. Bragg EEAP Survey SystemsCorp project number 94013.05

VAC System Survey Information

Building number	1242	Building secti	ion number _	K.1.1.1	KIELKI MAKEV
System type		Location	BSMT.	MEZH P.	m Fri
Manufacturer	AIRTHERM -	Model no.	<u>L2</u>	418	
Serial number	9100656	CFM			
Static pressure		Cooling type	CHUE	n wante -	VARL TE
Heating type	HOT WASTER-DUFF TO	1POA cfm	100	70	
Sketches & notes:	15 HP SUPPLY FO	ntu Not	EURINIA?	Torit'y	·
	KITCHEN IS NO	LONGER !	ust-	UNIT NOT	" HISO

BOILER - FUEL OIL H.W.

3 PHSS FULL WET BASCIC GENERATOR

SPENCEIL MODEL 4FW - Z40 - SFL-0-GFL

S.N. 10483

2100 MBH OUTPUT 2100 MBH INPUT 30 BSI WATER

TWO PIPE SYSTEM (MAN TEMY SYSTEM)

I CHAY KNIMMS C.W. TODAY

EMCS CONTROLS PUT ON WEAR CONTROL

Building Section: AHU-1 KITCHEN M.A.U. 1-1242 Building Number: BASEMENT MECH RM D.T. CONST. VOL. AHU Location: System Type: AIRTHERM LZ418 CENTRALAIRE Model No.: Manufacturer: CHILLED WATER Cooling Type: 9100 656 Serial Number: HOT WATER Heating Type: Sketches & Notes: ISHP SUPPLY FAN - KITCHEN NO LONGER IN USE BOILER FUEL OIL 3 PASS FULL WET BACK GENERATOR SPENCER MOD. NO. 4 FW 240 SPL O GPL 1674 MBH OUTPUT 2100 MBH INPUT AIR COOLED CHILLER Building Section: AHU-Z 1-1242 Building Number: RASEMENT MECH. RM. Location: TWO PIPE CW/HW System Type: AIRTHERM L1420 CENTRALAIRE Model No.: Manufacturer: Cooling Type: CHILLED WATER

SERVES ENTIRE FACILITY 7.5 HP SUPPLY FAN

9 100802

HOT WATER

Serial Number:

Heating Type:

Sketches & Notes:

AIR CONTED CHILLER

Building Number:

1-1326

HVAC System Survey Information:

Building Section:

System Type:	DV/ELEX REHEAT	Location:	SECOND FLOOR
Manufacturer:		Model No.:	
Serial Number:		Cooling Type:	Dx 2-22
Heating Type:	ELEC REHEAT		
Sketches & Notes:	AHU-11 INACCESSI	BLE 3UP	FAN ON FMCS
SWITCH ED TO	LOCAL		
			· —
Building Number:	1-1326	Building Section	
System Type:	(2) TWO PIPE CV	Location:	OFF HALLWAYS 2ND FL
Manufacturer:	York	Model No.:	A-S-V
Serial Number:	755113-142	Cooling Type:	CHILLWATER
Heating Type:	HOT WATER		
Sketches & Notes:	AHU-7 AHU-8	CORRIDOR	IZETURN THRU IMFML
ZOOM DOOR			

	. 100 f	Building Section:	
Building Number:	1-1326	Dunuing Section.	
System Type:	FANCOUS 4 PIPE	Location:	GENERALS ARFA
Manufacturer:	DUNHAM RUSTA	Model No.:	
Serial Number:		Cooling Type:	CHILL WATER
	HOT WATER		
Heating Type:			
	THEFE SPEED FAN		
HB SMITH #2	FUEL OIL BOILER CAS	T IRON 115F	TIONS IN BASEMENT
			0°F H.W. (2) SHP HWAVI

Building Number:	1-1326	Building Section:	
Dunums Rumber.		- · · · · · · · · · · · · · · · · · · ·	
System Type:	(2) AIR COOLED CHILLERS	Location: RFAR OF BLDG	
Manufacturer:	TIZANE	Model No.: <u>CGA - 10004 - FA</u>	
		Cooling Type: 12-22 CHILL WATER	
Serial Number:	L612719933	Cooling Type: <u>IC CC</u> CTITES TO THE	
Heating Type:			
Sketches & Notes:	(1) (OMP 460V 11	64 FLA	
	(2) COND FAN 460	OV II FLA 7 HP	
i) ZHP CLURMP (2) 10 HP CW PUMP, (1) IS HP CLU PUMP			

Ft. Bragg EEAP Survey SystemsCorp Project No. 94013.05

	1-1271	Building Section:	FIRST FLOOR
Building Number:	1-1326	panemy comme	
System Type:	DX/FLEC HEAT	Location:	CONFERENCE RUOM
Manufacturer:	CARRIER	Model No.:	
Serial Number:		Cooling Type:	DX 17-27
	FLEC DUCT HTR		
Heating Type:	FULL DOCT HIN		
Sketches & Notes:	AH-10 HEATER	208V 47 A	IPH DX (ODLING 2HP
*			
FAN	<u></u>	:	

Building Number:	1-1326	Building Section:	FICSI I COOK
System Type:	TWO PIPE AHI	Location:	MEH RM OFF HALLWAY
Manufacturer:	CHRUSLER AIR TEMP	Model No.:	<u> </u>
Serial Number:		Cooling Type:	CHILL WATER
Heating Type:	HOT WATER		
Sketches & Notes:	PLENUM RETURN WI	CLEANING S	LPPLIES, IAO PROBLEM
DIRTY FILTER	S CEOWDED INFOH	200M STORIA	G CLEANING SUPPLIES
IN FRONT CE	RETURN INTAKE	TYP AH 3	

Building Number:	- 1333	Building Section:	
System Type:	DY COOLING UNLY	Location:	OUTSIDE / REAR ENTRANCE
Manufacturer:	TRANE	Model No.:	CA 3008
Serial Number:	818158461	Cooling Type:	DX (VOLING R-12/22
Heating Type:	None		
Sketches & Notes:	SINGLE TONE OX	COOLING 12"x	R" OA INTAKE
OIL HW ROILE	R HB SMITH SERIES	28 4 SECTION	N CAST IKON WATER
693 900 BTU/	HR 7.0 GPM LIGHT	012 1/2 HP	RECIRC PUMP
Building Number:	1333	Building Section:	<u> </u>
System Type:	WINDOW AC UNITS	Location:	
Manufacturer:	FRIEDERICH FEDDERS	Model No.:	
Serial Number:		Cooling Type:	
Heating Type:			
Sketches & Notes:	(4) 28,000 BTU/	HIS WINDOW	AC UNITS
	(3) 10 300 BTU/	HIZ WINDOW	U ACUNITS
	U) 19 000 BTU/	HR WINDOW	AL UNIT

Building Number:	1-14'54.	Building Section:	
System Type:	DX /HOT WATER	Location:	
Manufacturer:	TRANE 1993	Model No.:	TTA ISOBAOGRA
Serial Number:	H12198692	Cooling Type:	1)x 2-22
Heating Type:	HOT WATER		
Sketches & Notes:	() COMPR MOTORS	12.8 PLA 4	- <i>c</i> ∞∨
	(2) FAN MOTORS	1.6 FLA 4	000

Building Number:	1-1459	Building Section:	
System Type:	(2) DX FLEC RH	Location:	
Manufacturer:	LEIBERT	Model No.:	UHZ90A - AMM
Serial Number:	301300-002	Cooling Type:	DX 2-22
	ELEC 1214 3 STAGE		
Heating Type:	1993 ALOV 22.6	1 / CITIA 5- 5	T 3 STAKE HEAT
391 FLA TOTAL (2) COMPRESSORS 19.9 RLA 460V INFRAIREP			
HUMIDIEIER	7.5 H? FAN CONE	DENSERS (7)	MODEL NO COF308LA

Building Number:	1-1434	Building Section:	
System Type:	DX /40T WATER SZ	Location:	
Manufacturer:	TRANF 1992	Model No.:	TTA 120B400BA
Serial Number:	H11198394	Cooling Type:	DX K-22
Heating Type:	HOT WATER		
Sketches & Notes:	(2) (OMOR MOTOR	10.5 RLA EA	4 4600
	(1) FAN MOTOR	2.7 FLA 4	SU V

Building Section: 1-1434 Building Number: Location: DX/1407 WATER System Type: TTA 090 A400BA TRANE 1993 Model No.: Manufacturer: Cooling Type: Dx 12-27 H12198592 Serial Number: HOT WATER Heating Type: COMPR MOTOR 13.3 RLA 460V Sketches & Notes: FAN MOTOR 16 FLA 460V

1-1434	Building Sections	·
	Location:	MECHANICAL ROOM
	Model No.:	JOTW-775-W
JOTW 121254-0393	Cooling Type:	DK
HOT LATER		
HOT WATER BOILFR	2.75 GP	H LIGHT ML
TUTHE WATER IF	P IN-LINE	PUMP
		
	Building Section	ı:
	Location:	
_	Model No.:	
	Cooling Type:	V
	Cooling Type.	
	HOT WATER BOILER	DX HOT WATER Location: PEERLESS Model No.: JOTW 121254 - 0393 Cooling Type: HOT WATER BOLLE 2.75 GETU/HR WATER I HP IN-LINE Building Section: Location: Model No.: Cooling Type:

Building Section: 2-1105 Building Number: BASEMENT DTWS AHU Location: System Type: 41218 AIR THEKM Model No.: Manufacturer: CHILLED WATER 1100GZO Cooling Type: Serial Number: HUT WATER Heating Type: ALL SERVES ALL FLOOKS IN SECTION 1; SUPPLY FAN Sketches & Notes: 7.5 HP/1745 RPM RETURN FAN 2.0 HP/1720 RPM . F.OILEK IS WELL-MCLAIN MODEL NO. 1788 DUAL FIRE 4.37 MBH OUTPUT

Building Section: 2 2-1105 Building Number: BASEMENT DTWS AHU Location: System Type: L1218 AIR THERM Model No.: Manufacturer: Cooling Type: CHILLED WATER 9100619 Serial Number: HOT WATER Heating Type: Sketches & Notes: SAME CONFIG. AS SECTION 1: O.A. LOCKED CLOSED/ RELIEF LOCKED CLOSED; BUILDING SECTION ALSO HAS 100% O.A. UNIT SERVES KITCHEN ONLL

Building Section: _____ 2-1105 Building Number: BASEMENT DTWS AHU Location: System Type: L1218 AIR THERM Model No.: Manufacturer: CHILLED WATER 9100 G 18 Cooling Type: Serial Number: HUT WATER Heating Type: Sketches & Notes: SAME CONFIG. AS SECTION 1; OA. DAMPER DISABLE CLUSED; FILTERS HAVE REEN" REMOUED

Building Section: 4 2-1105 Building Number: BASEMENT DTWS AHV Location: System Type: Model No.: <u>L1218</u> AIR THERM Manufacturer: Cooling Type: CHILLED WATER 4100 G 17 Serial Number: HOT WATER Heating Type: AHU SERVES ALL FLOORS IN SECTION 2 ; SAME Sketches & Notes:

SECTION 1

CONFIG. AS

Building Number:	2-1120	Building Section:	
System Type:	TWO PIPE FAN(OILS	Location:	<u> </u>
Manufacturer:	<u> </u>	Model No.:	
Serial Number:		Cooling Type:	CHILLED WATER
Heating Type:	HOT WATER		
Sketches & Notes:	3 SPEED FANG W	VATER (NOLED	(HILLER
	SECTIONAL FUEL OIL	ROUFR	
			7
Building Number:	2-1120	Building Sections	
System Type:	QUALTEMP WATER	Location:	FIRST FLOOR
Manufacturer:	CENTRALAIRE	Model No.:	
Serial Number:		Cooling Type:	CHILLEN WATER
Heating Type:	HOT WATER		
Sketches & Notes:	7.5 H? SUPPLY F.	ANI 3HP	MAJ LAYUTA S

Building Number:	7-117.7	Building Section:	ALLFLOORS
System Type:	TP FAN COILS	Location:	
•	TRANE	Model No.:	BSP ZA 008/006
Manufacturer:	TOMINE	Wiodel No.:	,
Serial Number:	S 93B 03498	Cooling Type:	CHILLED WATER
Heating Type:	HUT WATER		
Sketches & Notes:	3 SPEED PANS		
			·
Building Number:	2-1133	Building Section:	ALL FLOORS
System Type:	WATER SOURCE H.P.	Location:	
Manufacturer:	CARRIFR	Model No.:	
Serial Number:		Cooling Type:	Dx
Serial Humber.			
Heating Type:	HOT WATER		
Sketches & Notes:	EVAPCO COOLING TO	OWER 3 CELL	CROSSFLOW MODEL
NO. PMW-174	A SERIAL NO. 9791	19 BOILER	CAST IRON PEERLESS
		-	

Building Number:

7-1177

TP FAN COILS

HVAC System Survey Information:

Location:

Building Section: ALL FLOORS

	TOP EAN COULS	Location:	
System Type:	TP FAN COILS	Docation.	0-2-0-25/
Manufacturer:	TRANE	Model No.:	BSP ZA 008/006
Serial Number:	5 93B 03498	Cooling Type: _	CHILLED WATER
		·	
Heating Type:	HOT WATER		
Sketches & Notes:	3 SPEED FANS		· · · · · · · · · · · · · · · · · · ·
Building Number:	2-1133	Building Section:	ALL FLOORS
•		Location:	
System Type:	WATER SOURCE H.P.		
Manufacturer:	CARRIFR	Model No.:	
Serial Number:		Cooling Type:	Dx
Heating Type:	HOT WATER		
Sketches & Notes:	EVAPCO COOLING TO	OWER 3 CELL	- CROSSFLOW MODEL
			CAST IRON PEERLESS
110 13641 1 [7]	T 44		

NAT GAS/OIL 2,540 MED GAS INPUT/17.6 GPH OIL

Ft. Bragg EEAP Survey SystemsCorp project number 94013.05

VAC System Survey Information

3,2	ĺ	þ.
55	0	F

Building number	2-1133	Building section number
System type		Location
Manufacturer	CARRIER WS. HPUMS	Model no.
Serial number		CFM
Static pressure		Cooling type
Heating type	50 KQ With Source	O A cfm
Sketches & notes:		THOS No EMCS
	has 2 propries an	to Secondary Phays
•	EVAPCO COOLING	7 TONEK
	3 con cross	From
	moder bum	-174A S.N. 879178
<i>.</i> 5	5 HP BASIA	I WATOR RELIKE PUMP RUNNING
•	NO FUNS	RUNNING

NO CHILLER

BOILER - PEERLESS & BOYERDOWN, PA

DURG FUEL NAT GAS / DIE COXT TRUE

130T

2540 MPH GIS MOUT 1714 GF 7 11
1744, 100 Bra/2x wayer outfur

Building Number:	2-1139	Building Section:	
•	D.T. C.V.	Location:	IST FL MECH RM
System Type:	·		
Manufacturer:	CENTRAL AIRE		AIRTHERM LZOIU
Serial Number:		Cooling Type:	CHILL WATER
Heating Type:	HOT WATER		
Sketches & Notes:	DES 20% OA BUT I	DAMPER CLUSED) : 7.5 HP SUPPLY SHP
RETURN : 3	WAY VALVES ! (AR	RIER R-22 A	IR CUOLED CHILLER
	3B 150 550 AA SER		·
1.01.100.			
Building Number:	2-1138	Building Section:	2
System Type:	DT.C.V.	Location:	PASEMENT MECH. RM
Manufacturer:	CENTRALAIRE	Model No.:	AIRTHERM LIZIS
Serial Number:		Cooling Type:	CHILL WATER
Heating Type:	HOT WATER		
Sketches & Notes:	10 HP SUPPLY 5	HP RETURN F	AN; BURNHAM BOILER
		•	4.1 GPH 10 HP DT
WATER PUMP	•		

Building Number:

HVAC System Survey Information:

Building Section: SHOP FLOOR AREA

System Type:	UNIT HEATERS	Location:	CEILING MOUNTED
Manufacturer:	DUNHAM BUSH	Model No.:	
Serial Number:		Cooling Type:	NONE
Heating Type:	STEARA		
Sketches & Notes:	1/9 HP FAN MOTOR	5 2 01601	ERS : PEERLESS LIGHT
OIL CAST IRON	J SECTIONAL 1,241	200 BTUH ST	EAM MOD. NO. OTB FDAS
WEIL - MCCLAI	N #Z FUFL OIL CAST	IKON SECTION	AL 15-25 GPH RUKNER
		·.	
·			
Building Number:	2-1549	Building Section:	OFFICES/BRK RM
System Type:	WINDOW AC UNITS	Location:	
Manufacturer:		Model No.:	<u> </u>
Serial Number:		Cooling Type:	DX WINDOW UNIT
Heating Type:	(1) 16 300 BTU/HR - M.	AIN OFFICE	
Sketches & Notes:	(1) 23 800 RTV/H	12	(1) 18,000 BTU/HR
	(1) 10,000 BTU/H	·	(1) 16,000 BTV/HR

Building Number:	2.1728	Building Section:	ONE - SOUTH
_		-	
System Type:	SINGLE TONE AHU	Location:	PORCH - THIRD FLOOR
Manufacturer:	TRANE CLIMATE	Model No.:	CHANGER CODE 12 DEUS
Serial Number:		Cooling Type:	CHILLED WATER
Heating Type:	HOT WATER		
Sketches & Notes:	ON EMOS COURSOL ;	(2) R-27 A	IN COOLED CARRIER MOD
NO. 306810	0526 (4) COMPRESSO	RS (8) FANS	5 1.75 Hr EA 20% 04
10 HP CW PUMP	HBSMITH CAST IR	ON COILER F	FUEL OIL 12 SECTIONS
2,469,400 BT	V/HP WATER 25 GPH	OIL (3) 5 HP	HW PUMPS BOILER P.AD
Building Number:	2-1728	Building Section:	TWO FOUTH
System Type:	SINGLE TONE AUI	Location:	SELUND ELOOK
Manufacturer:	HZUS MAHNED	Model No.:	
Serial Number:		Cooling Type:	CHILLED WATER
Heating Type:	HIT WATER		
Sketches & Notes:	TRANS CHILLER IN	P.ASEMENT	MODEL NO. CGARCAOLA
301=23 (2) (OMP 72 RLA FA (4)) COND FAIR	IHP FA

Building Number:	7-1728	Building Section:	RASEMENT
-	PACKAGED SZ (2)	Location:	WALL MOUNTED
System Type:	THE RAIL DE SELE	Document.	
Manufacturer:	LIERERT DATAMATE	Model No.:	
Serial Number:		Cooling Type:	DK R-22 .
Heating Type:	FLFC 50 KW		
Sketches & Notes:	ELEC HUMIDIFIER -	10 RLA 20	DINT H91 085/8
SPERN FAN	15 1/0 HP 1/9 H	P	
, ",			
	•		
	· ·		

Building Section: 3 2-1731 Building Number: BASEMENT MULTIZONE Location: System Type: AIRTHERM . R/L1420 5/13025 Model No.: CENTRALAIRE Manufacturer: 1100 FOG / 9100600S Cooling Type: CHILLED WATER Serial Number: HIST WATER Heating Type: O.A. ACTUATOR DISABLED LICKED CLOSED RET FANI Sketches & Notes: SHP MAS ROW SUP FAM JS HP MAS REM

Building Number:	2-1728	Building Section: _	RASEMENT
~			
System Type:	PACKAGED SZ (2)	Location:	WALL MOUNTED
Manufacturer:	LIEBERT DATAMATE	Model No.:	
Manaraterer			
Serial Number:		Cooling Type: _	DK R-ZL
Heating Type:	ELFC 5.0 KW		
Sketches & Notes	ELEC HUMIDIFIER -	7.0 RLA 205	0WT FIG 1 085/8
ORCICIOS CO TVOICO.			• •
SPEPD FAN	15 1/0 HP 1/9 HI	2	

Building Section: _ Building Number: BASEMENT Location: MULTIZONE System Type: AIRTHERM R/LIAZO 5/13020 Model No.: CENTRALAIRE Manufacturer: Cooling Type: CAILLED WATER 1106-606/9100G00S Serial Number: HIST WATER Heating Type: O.A. ACTUATOR DISABLED LOCKED CLOSED BET FANI Sketches & Notes: SHP MAS RUN SUP FAM TISHP MAS REM

Building Number:	2-1731	Building Section:	2
-		Location:	REAR OF BLDG
System Type:	MULTIZONE AHU	Location:	
Manufacturer:	(ARRIFR	Model No.:	30GBIIO SSO AA
Serial Number:	×697406	Cooling Type:	CHILLED WATER
Serial Number:		20011119 177	
Heating Type:	HOT WATER		
Sketches & Notes:	(5) COMP: (3) 70	9.1230/3/60	102.9 RLA 446 LKA
		08/230/3/60	
		•	
(10) COND F1	ANS 6.6 FLA 1.	15 NEC HP F	A I.SI KWOUT

Building Number:	2-1731	Building Section:	
System Type:	SINCLELANT AHUS	Location:	REAR OF BLD ()
System Type.	211112	2004.0	
Manufacturer:	BOHN AC/RDIV	Model No.:	DVS OM BULL
			AT 5.8
Serial Number:	BUS146.	Cooling Type:	CHILLED WATER
Heating Type:	HOT WATER		
Sketches & Notes:	AIR LOOLED LONDEN	SEIR AC-2	AC-1 SERVE
DALIPCONIT	IREADING ROOM CON	D FAN 1/2 HI	24 AMPS